FREIGHT TRAFFIC ISSUE

What can railroads do to make **TOFC** more useful to shippers? . . . . . p. 21

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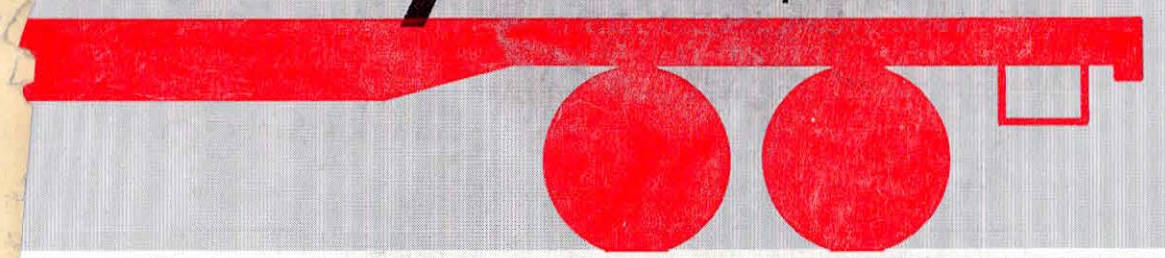
June 24, 1963

RAILWAY AGE WEEKLY

piggyback at mid-year: p. 15

Which Plans are growing fastest?
What traffic-building moves are coming?
What's the potential for Plan V?
What's the outlook for containerization?



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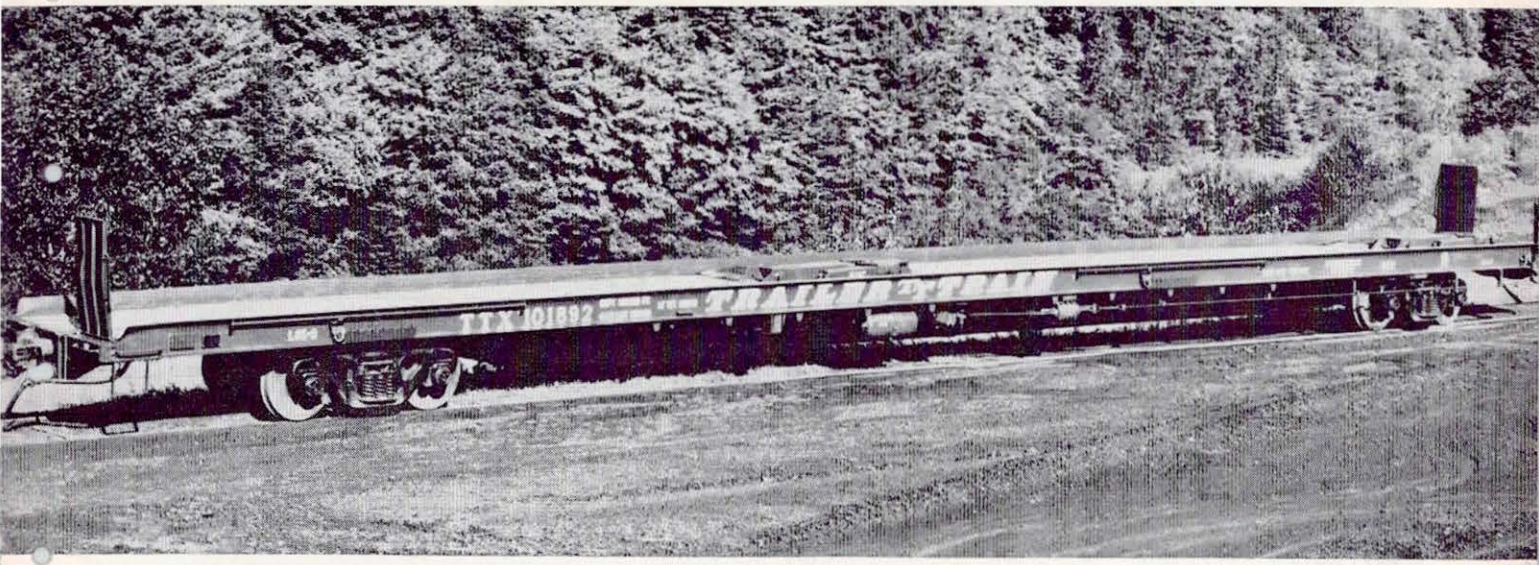
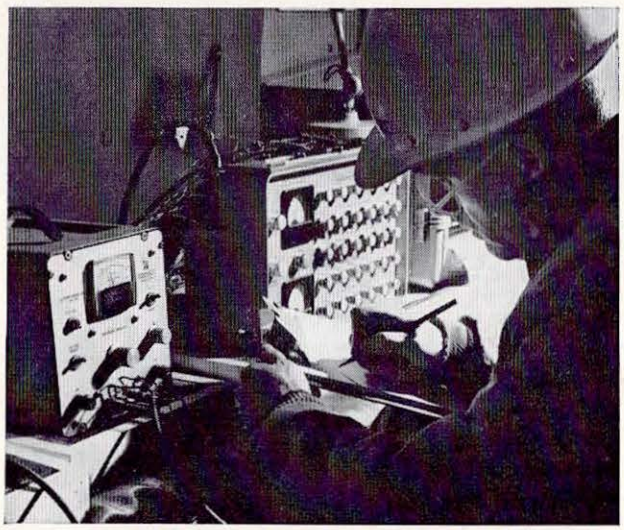
RACK-EQUIPPED TTX cars carry new automobiles to market on fast-freight schedules. King-size flat cars like these, many built by Bethlehem, are rapidly bringing new-car traffic back to rails.

Workhorse of the piggyback fleet





IN-SERVICE TESTING is a continuous part of Bethlehem's freightcar development program. Here, special instruments in caboose enable Bethlehem engineer to study dynamic stresses in adjacent piggyback car in normal freight-train service.

This new 85-ft car of standard deck height reflects Bethlehem's progressive engineering from end sill to end sill. Constituting the backbone of the ever-expanding Trailer Train piggyback fleet, this design is suitable for transporting highway trailers, and can easily be modified to carry containers, or equipped with auto racks.

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All new Bethlehem concepts in engineering and equipment are thoroughly proved out through complete performance and endurance tests on a prototype car. Bethlehem pioneered in the design and construction of piggyback flat cars, building the original cars for transporting two trailers per car over seven years ago. These cars are part of the Trailer Train fleet, to which Bethlehem has added large numbers of even more durable and modern quality-built cars.

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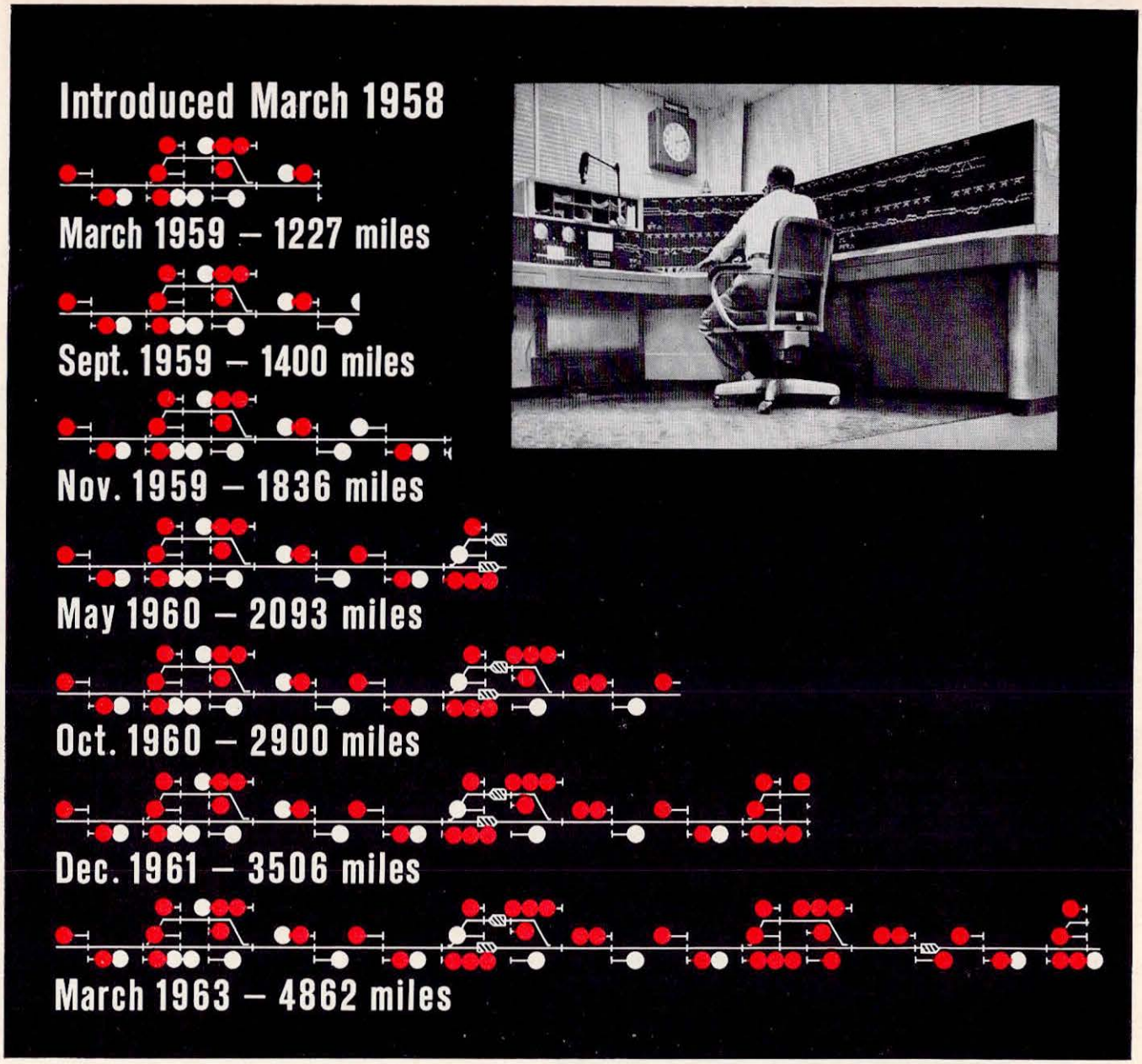
Introduced March 1958
March 1959 – 1227 miles
Sept. 1959 – 1400 miles
Nov. 1959 – 1836 miles
May 1960 – 2093 miles
Oct. 1960 – 2900 miles
Dec. 1961 – 3506 miles
March 1963 – 4862 miles

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RAILWAY AGE WEEK AT A GLANCE

June 24, 1963 • Vol. 154, No. 24

RRs counter in non-ops case

New proposals served on the non-ops by railroads include a call for wage adjustments (some up, some down), and an end to certain rules hampering managerial discretion .....**p. 9**

TOFC: How's it doing?

A flow of new rail car, trailer and container equipment from builders to railroads and car pools is attesting to the steady growth of the nation's piggyback services.....**p.15**

Shippers eager for expansion of TOFC

Expansion of piggyback to cover more points through greater railroad-motor carrier coordination is urged by respondents to this month's Traffic Poll.....**p.21**

REA starts new container moves

A new transcontinental container service, under a schedule set up by REA Express and five railroads, offers fourth-day delivery between New York City and Oakland, Calif.....**p.27**

Who will be first with ACI?

Several roads are eyeing one or another of the already available automatic car identifiers—but there still seem to be a lot of question marks.....**p.40**

ACF designs new integral-train cars

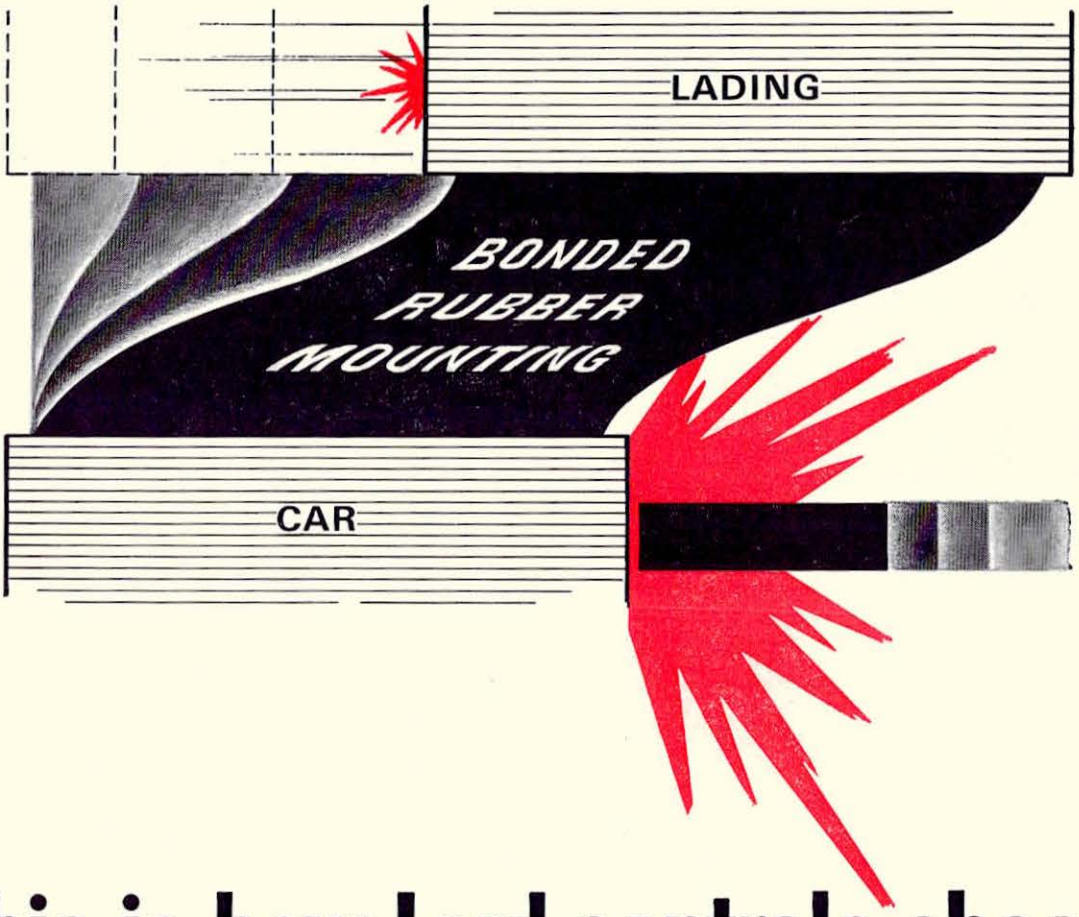
Two 100-ton-capacity coal cars—one a rotary-dump type, and the other a bottom-dump, open-top version of the Center Flow car—have just been announced.....**p.52**

For B&O piggyback: Revolution begins

E. W. Wright, a former trucker who now heads the B&O's newly created Trailer Service Department, has given the road a big push into Plan V piggyback.....**p.70**

New markets open to Southern's COMAR

The Southern's new Coordinated Motor and Rail (COMAR) service, opening up new markets for shippers, promises to spur the road's already booming rail-highway business....**p.76**



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RAILWAY AGE WEEK AT A GLANCE

NH changes freight sales organization

Former regional freight traffic managers have been formed into a team of commodity specialists to develop new business for the bankrupt line p.96

Per diem law called 'essential'

ICC Chairman Walrath has called for enactment of incentive per diem legislation to supplement the multi-level car-rental system railroads propose to establish next January 1....p.98

The Action Page—Guides for rate-making

What transportation needs right now is widespread acceptance, by shippers and carriers alike, of some new and realistic principles of transportation pricing p.102

Short and Significant

An excess-crew bill was defeated...

by the Illinois House of Representatives last week. The bill would have frozen the size of Illinois freight-train crews at five. It got 70 votes; 89 were needed for passage.

A Norfolk & Western coal-loading record...

was set in the second week of June, when 28,541 coal cars were loaded. The figure exceeded the previous high by 642 cars and was nearly 22% above the comparable 1962 week.

Southern bought controlling interest...

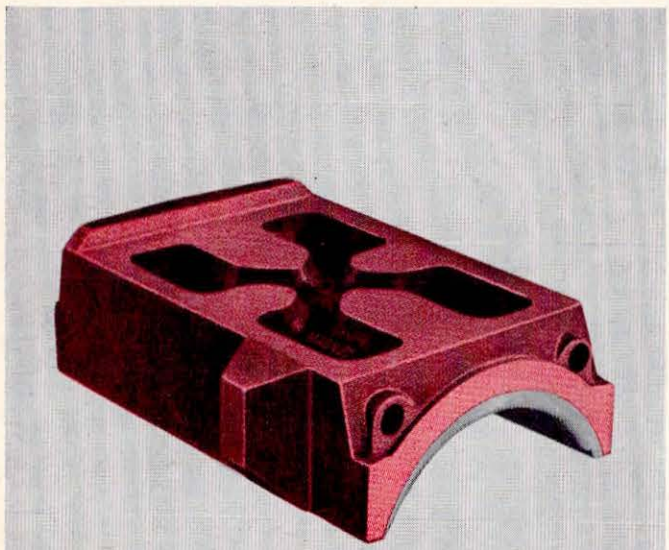
of the Central of Georgia last week, paying out $22.6 million for the Frisco's 71% stock interest. Facilities of the Southern and CofG will be combined in a number of places.

Current Statistics

Operating revenues		Carloadings revenue freight	
3 mos., 1963	$2,238,049,679	24 wks., 1963	13,000,375
3 mos., 1962	2,286,932,404	24 wks., 1962	13,192,995
Operating expenses		Freight cars on order	
3 mos., 1963	1,798,030,564	May 1, 1963	19,872
3 mos., 1962	1,823,291,544	May 1, 1962	14,244
Taxes		Freight cars delivered	
3 mos., 1963	214,320,105	4 mos., 1963	13,300
3 mos., 1962	253,124,089	4 mos., 1962	12,315
Net railway operating income		Serviceable cars	
3 mos., 1963	125,807,318	April 1, 1963	1,414,166
3 mos., 1962	116,556,316	April 1, 1962	1,461,833
Net income, estimated		Cars awaiting repairs	
3 mos., 1963	83,000,000	April 1, 1963	128,690
3 mos., 1962	71,000,000	April 1, 1962	136,151

These Magnus Bearings can Stabilize Journals

Give you still longer car bearing life, may double bearing performance you're getting now.



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(AAR Test-Approved)

Magnus Flat-Backs stay seated on the journals, eliminate excessive fore-and-aft movement under all normal operating conditions. That means full fluid oil film lubrication, maximum bearing performance all the time. Rear seals and bearings last longer. 2,000,000 car miles per hot box is a realistic goal for Flat-Backs.

Developed by AAR research, 10,000 carsets of Hi-Hat bearings are now authorized for interchange. They stabilize journals too. Wider wedge-journal box column contact area lets wedge take brunt of impact forces. And Hi-Hats are lighter—can save real money if current operating tests prove satisfactory.

For helpful, detailed information, write Magnus Metal Corporation, 111 Broadway, New York 6, or 80 E. Jackson Blvd., Chicago 4.

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WHAT'S HAPPENED TO NON-OP WAGES

Year Effective	Increase (Cents per Hour)
1951	19.5¢
1952	11¢
1953	—1¢
1954	. . .
1955	14.5¢
1956	10¢
1957	15¢
1958	12¢
1959	3¢
1960	6¢
1961	. . .
1962	10.28¢

(Plus holiday pay effective in 1954 and health-and-welfare benefits effective in 1955, 1956 and 1961. Wage increase figures include cost-of-living adjustments incorporated in basic rates.)

RRs Counter in Non-Ops Case

Major items in the railroads' notices: Up and down wage adjustments, elimination of restrictive rules — and binding settlement by a tri-partite commission if the parties can't agree.

Railroads are starting to tackle their wage-rules problems with the non-operating unions with the same vigor—and much the same approach—they've applied to the operating crafts' work-rules dispute.

Counter-proposals being served on the non-ops provide for:

- Adjustments in pay which could bring increases for skilled employees and wage cuts for unskilled workers.
- Elimination of all rules hampering the exercise of managerial discretion in nine specific areas, including transfer of work, contracting-out of work and introduction of technological changes.
- Establishment of a tri-partite commission—apparently similar in design to the Presidential Railroad Commission—to investigate and make recommendations for settlement which would be binding on both parties, in the event carriers and non-ops are not able to reach an agreement in negotiations.

Union demands, served in late 1962 and in May, 1963, cover both wages and job stabilization. Wage proposals range from 25% asked by the Signalmen to 10% plus 14 cents asked by the six shop-craft unions and 29 cents plus a 3½%-per-year improvement factor plus a cost-of-living ecsalator clause asked by four other organizations.

- **Job demands pending.** The shop-craft group has had a stabilization demand pending since last October; the other five participating non-ops served a similar proposal May 31. In addition, all 11 unions want improved vacations, additional holiday benefits and more group life insurance (RA, June 10, p. 44).
- **10-cent cut.** The carriers' wage proposal reads this way:

"All rates of pay of non-operating employees which are below the composite average straight time hourly rate for the 73 classes of non-operating employees shall be reduced by 10 cents per hour, and all rates of pay which are above the composite average . . . shall be increased on a proportionate percentage basis, so that the composite average straight time hourly rate for the 73 classes . . . after the adjustments will be identical to such average before the adjustments."

Changes would be made on an individual-railroad basis. Averages would be computed, railroad by railroad, by dividing the straight time compensation by the straight time hours paid for as reported to the ICC on Wage Statistics Form A. Computation would be based on the three-month period immediately preceding wage adjustments.

- **Planning for change.** The railroads' proposals on technological and organizational change are sweeping:

"All agreements, rules, regulations, interpretations or practices, however established, which interfere with or prohibit a carrier from exercising the following rights are hereby eliminated:

- "The right to transfer work either permanently or temporarily from one facility, location, territory, department, seniority district or seniority roster to another.
- "The right to abandon partially or entirely any operation or to consolidate any facility or service heretofore operated separately.
- "The right to contract-out work.
- "The right to lease or purchase structures, facilities, equipment or component parts thereof, and to arrange for the installation, operation, maintenance or repair thereof by employees other than those of the carrier.
- "The right to trade in, repurchase or exchange units or components.
- "The right to make effective any

WATCHING WASHINGTON WITH WALTER TAFT

TAFT

● **FOR THE FIRST TIME,** the ICC has made a determination as to who has the burden of proof in cases involving suspended initial rates of carriers. The determination has the effect of putting the burden on protestants, who could be shippers or competing carriers. Heretofore, the Commission has said only that the burden was not upon a carrier proposing an initial rate, that being its interpretation of pertinent provisions of the Interstate Commerce Act. That Act, of course, places the burden of justifying changes in existing rates on carriers proposing the changes. The present report, in I&S No. M-15124, came out of the Commission's reconsideration of a prior report by its Division 2. Involved were initial rates proposed by a small trucker, Jim Tiona, Jr., on animal feed from Tupelo, Miss., and Wales, Tenn., to destinations in the Midwest and Southwest. Southwestern and western railroads were the protestants. The Commission found they had not met the burden-of-proof requirement, so it cleared the rates which had been condemned by Division 2.

THE COMMISSION relied on Section 7(c) of the Administrative Procedure Act, which puts the burden of proof on "the proponents of a rule or order." The protestants were called "proponents of an order," because they "requested that the Commission suspend and investigate the rate schedules involved and that ultimately an order be entered canceling the schedules."

THE MAJORITY REPORT, by Commissioner Freas, drew separate expressions from Commissioner Murphy, who thought the majority should have been more specific, and Commissioner Webb, who argued that the burden of proof rests upon a carrier proposing an initial rate, or that the Commission is empowered to put it there. Chairman Walrath subscribed to the Murphy statement while Commissioner Tucker concurred in the Webb statement. Commissioner Tuggle noted his concurrence "in the result" of the majority report, so that report stated the view of six commissioners.

COMMISSIONER MURPHY felt that the time had come for specific assignment of the burden of proof in cases involving initial rates, but he also felt the majority should have stated flatly that "the burden is upon protestant." He found this "implicit in the decision . . . though not specifically stated." Moreover, he does not think it is an unfair requirement, because it satisfies "all requirements of orderly procedure and sound administration."

COMMISSIONER WEBB'S STATEMENT, though also labeled "concurring," was a lengthy and heavily-documented essay in support of his contention that the burden should be on the carrier. His concurrence was only in the "end result" of the majority report, i.e., clearance of the rates in issue.

THE COMMISSIONER also served notice that he will be in disagreement with the Commission majority so long as it adheres to its present position, whether or not his dissent is noted in each case. He explained that the cases "are so numerous that repetition of my divergent views . . . would serve no useful purpose."

MEANWHILE, Mr. Webb commended the majority "for rescuing burden of proof from the limbo to which it has lately been assigned." He called the majority report "long overdue," because the Commission has been "remiss" over the past 20 years "in not issuing a single report which attempts to explain in any meaningful way who has the burden of proof, and why, in proceedings involving suspended initial rates and investigations into the lawfulness of existing rates."

changes in work assignments or operations.

- "The right to cross craft lines.
- "The right to consolidate seniority districts and seniority rosters and to establish new seniority districts and seniority rosters.
- "The right to effect technological changes, including the installation of labor-saving equipment or machinery."

On moves affecting transfers of work or changing seniority districts or rosters, a carrier would give "reasonable notice to the organization or organizations representing employees affected of its proposed changes and the manner in which employees shall be selected and assigned."

Negotiations would be held on the question of selection and assignment of employees. But if no agreement is reached within 30 days, "any party may submit the question to final and binding determination by an arbitration board . . . [which] shall consider and decide only the question of the selection and assignment of employees. It shall not undertake to examine whether the change proposed by the carrier is to be carried out, nor what protection shall be afforded to affected employees."

● **Supplemental benefits.** Carrier-proposed employee protective benefits include supplemental unemployment payments and reimbursement for expenses of employees forced to relocate.

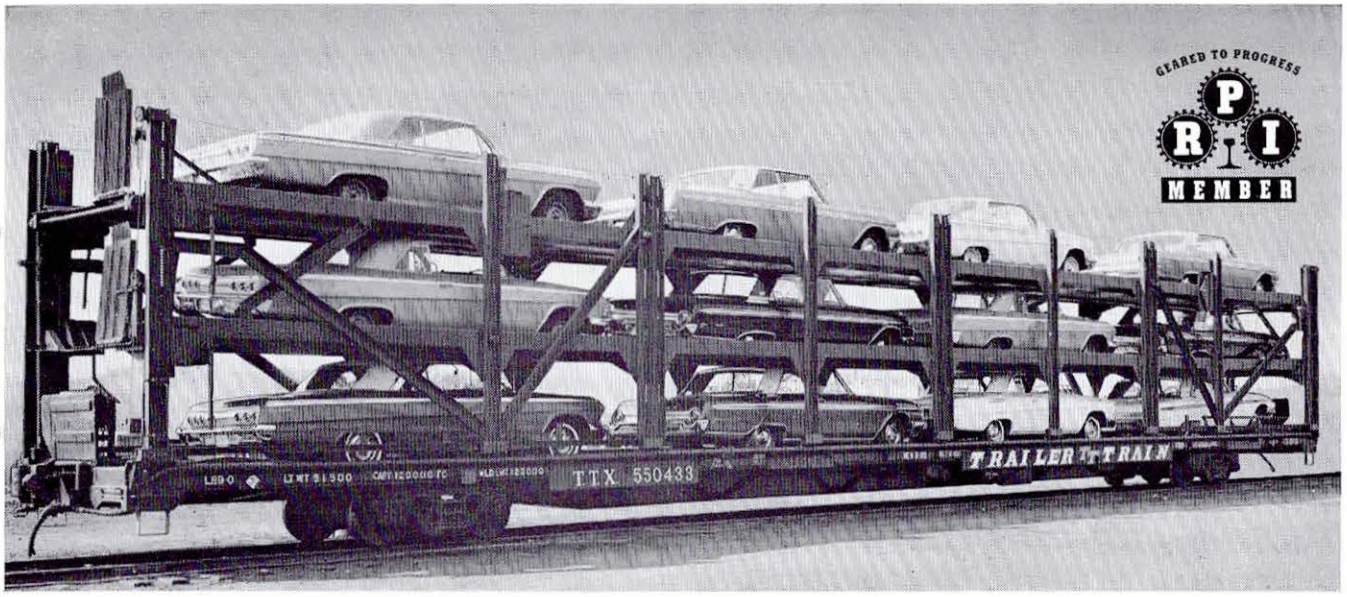
Supplemental unemployment benefits would be paid for each day of unemployment for which benefits are payable under the Railroad Unemployment Insurance Act. They would be paid in an amount sufficient to increase an employee's total benefit to 60% of the daily rate in his last employment with the carrier. Payments would be limited to 130 days for employees with less than 10 years' service; 195 days for 10 to 15 years' service; and 260 days for more than 15 years' service.

● **'Final disposition.'** The carriers regard their proposals as in "full and final disposition" of the demands served by the various non-op organizations.

But—in the event, considered probable by most observers, that the parties can't negotiate a settlement, the railroads want a special commission set up to hear the case and make a report which would be binding on both sides.

The carriers don't say how the mechanics of establishing the commission would be handled. But their proposal parallels the original carrier thinking regarding the Presidential Railroad Commission in the work-rules case.

The proposed non-op commission, the railroad proposal says, "shall consist of representatives of the public, the carriers and the employees and shall provide a full and fair hearing to the parties. The recommendations of the commission shall be final and binding."



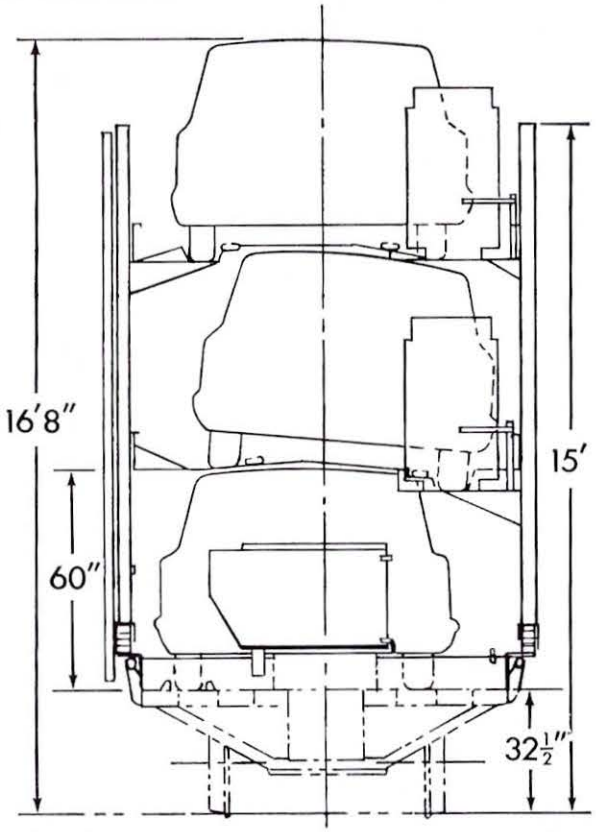
The Dana R-3 Rack measured 16′ 6⅝″ from top of rail to top of load, as shown above at a recent public demonstration.

DANA LOW-CLEARANCE RACKS ROLL THROUGH TIGHT TUNNELS

Roads with Problem Clearances Can Now Handle Auto Traffic

A new Dana-designed Auto Rack, mounted on 89′ low-clearance flat cars—allows railroads to make tri-level shipments where overhead clearances are 16′ 10″ or more.

The R-3 is designed for compatible *through loading* with other tri-level racks. All deck areas are clear. No blisters or special positioning of automobiles is required. Ends of racks are elevated for unloading—and lowered upon completion of loading. The operation is fast and simple using a conventional electric wrench. Cushioned with Dana's proven *Shear Pads*, the R-3 Rack reduces impact forces 50% to 75%.



Dana's unique nesting arrangement allows 60″ deck spacing with only 16′ 8″ overall clearance.

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U25B completes 8,000,000 unit miles on 6 major American railroads

General Electric U25B's are currently logging nearly one million miles per month on railroads spanning the country. To date, eight million accumulated miles have demonstrated increased revenue capacity and reduced maintenance to six of the nation's major railroads.

On one railroad, the increased power of eight 2500-hp U25B's resulted in the retirement of 17 older locomotives and a 10 percent reduction in scheduled running time.

During spot maintenance on another, three men are assigned to other jobs when the U25B's are scheduled. Design that reduces maintenance is the reason. The U25B has only four rotating electric machines above the platform, a primary air cleaner which requires no servicing, a simplified piping system and equipment pressurized to keep out dirt.

The all-new U25B can help your railroad move more freight faster, at lower cost. For information on how the U25B matches your railroad's requirements, let a General Electric transportation engineer prepare an application study for your consideration.

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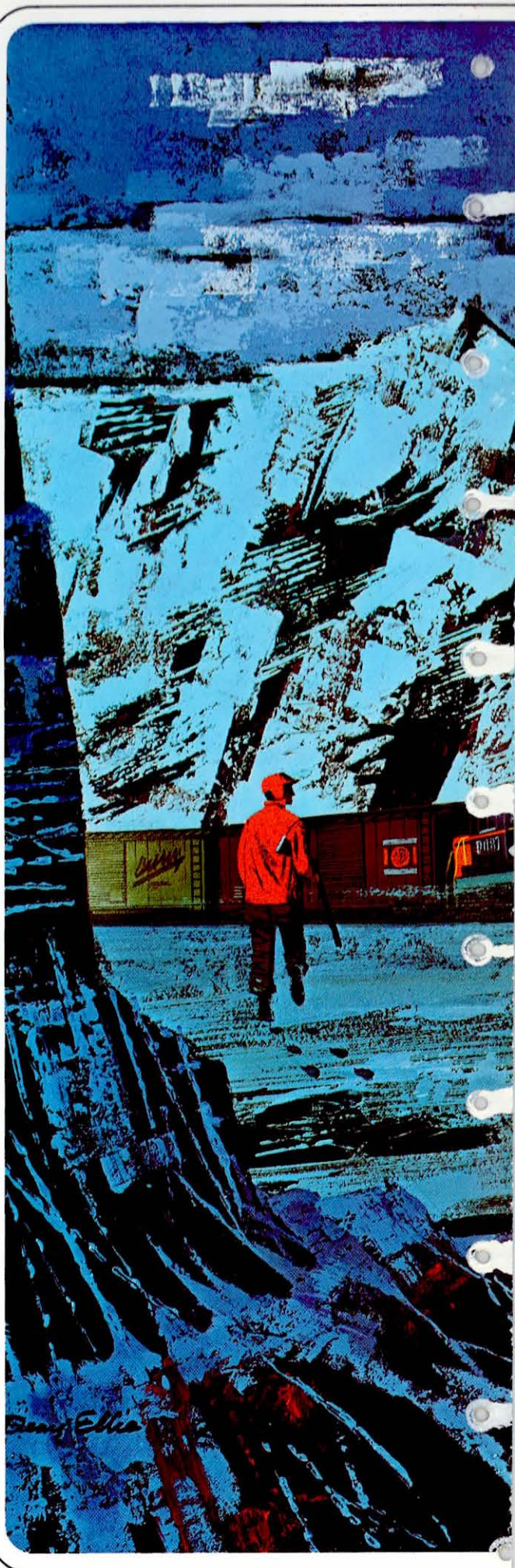
GENERAL ELECTRIC



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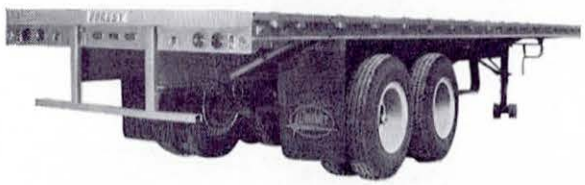
Rugged...and Right for Piggyback Service
DORSEY'S NEW I-BEAM *Giant* PLATFORM

New Low Weight! • 25% Stronger! • Surprising Price!

(hundreds of pounds lighter) (than the original Giant)



Dorsey's new I-Beam Giant has the extra stamina to stand up under the most rigorous piggyback operation. Fabricated on the latest automatic welding machines, the high-tensile steel main frame is outstanding in workmanship as well as design. Strength is engineered into each part to meet its particular requirements and at the same time hold weight to a minimum.

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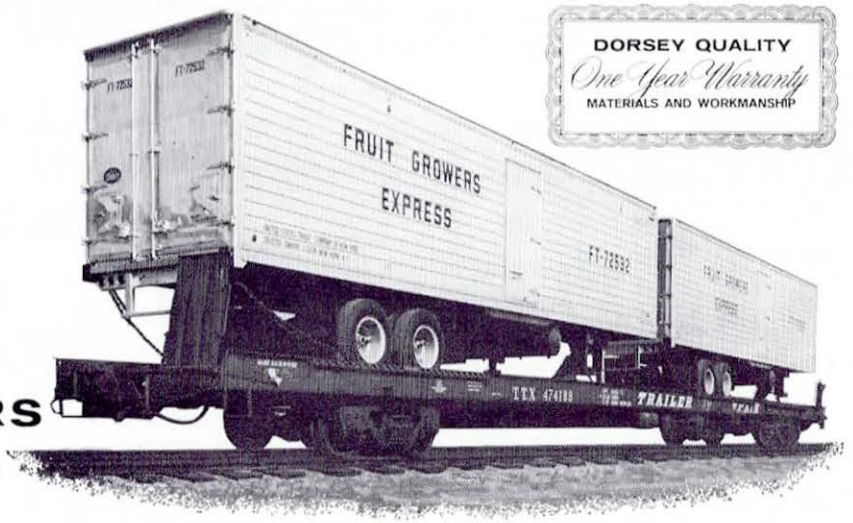

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AT MID-YEAR—

TOFC: How's It Doing?

Plans II and III are pacing piggyback's growth, a Railway Age survey shows—but Plan V is moving up fast. Meanwhile, containerization shows signs of developing a greater popularity.

Is piggyback losing its pep, its punch? Is the novelty wearing off? Is TOFC, in a sense, becoming the victim of its own success?

Three qestions with but a single answer: No.

At the mid-point of 1963, piggyback loadings are about 15% higher than they were at this time last year. New services are opening up. A steady flow of new rail car, trailer and container equipment is moving from builders to railroads and car pools. Containerization may be ready to move into the era of growth long predicted for it—especially as U. S. industry becomes more foreign-trade conscious. Plan V piggyback, the point-rate, through-route coordination of railroads and motor carriers, is getting its biggest push. Many roads are laying detailed plans to get new business moving piggyback—mail, tank trailers, small shipments, canned goods, fresh meats and other perishables, to name just a few areas of concentration.

● **No brakes on TOFC.** The Interstate Commerce Commission's investigation of piggyback (Ex Parte 230) is still under way—and may be for many, many months. But neither the investi-

gation nor the proposed rules which the Commission has set up seems to have put a brake on TOFC growth. Forwarders—including those owned by major motor common carriers—are turning increasingly to piggyback. More and more truck lines are finding they can live, profitably, with TOFC—as the recent sudden expansion of Plan V indicates.

A Railway Age survey of railroads offering piggyback service shows Plans II and III growing fastest—but the new emphasis on Plan V expansion could move it to the forefront by this time next year.

Most roads are providing a comprehensive service. Almost all operate under Plans II and III; the majority also use Plans I, IV and V.

● **Plan III growing.** Plan III is developing most rapidly on 35% of the roads surveyed; Plan II on 42%. Plan I ranks third in rate of growth, Plan V fourth—but Southern's ambitious COMAR Plan V setup is just getting under way; Chesapeake & Ohio this month entered into Plan V arrangements with 20 truckers; and Reading, Lehigh Valley, Santa Fe, Wabash, Louisville & Nashville, Great Northern, Frisco, Nickel Plate, Western Maryland and Atlanta & West Point all indicate they're planning expansion of Plan V operations in the months ahead.

New sales efforts

A number of carriers see a good potential in tank-trailer piggyback; others will concentrate hard on promoting movement of perishable commodities needing refrigerated trailers or containers. Many roads are aiming at further refinement of sales techniques and operations—including Frisco, which is directing its sales approach "to specific shipper solicitation, with particular emphasis on backhaul traffic to balance our movements."

Most carriers are cautious in commenting on the future of containerization. As Frisco notes, it is "a rather broad and complex subject."

● **Pools popular.** More than half the railroads surveyed think pools will furnish a majority of the containers used in future operations. Almost all the others think the carriers will own the boxes—only a few believe shippers themselves will wind up providing most of the containers.

Frisco points out that containerization's "principal growth has been in the field of foreign freight, where through movement of the traffic eliminates extra handling at ports and retards pilferage. Containers for this type of service are being furnished principally by the steamship lines with some assistance from container-leasing firms. On domestic freight, it appears that each situation must be treated individually—the particular traffic involved dictating the size and type of containers required to handle the product efficiently. This type of containerization will lend itself to shipper-owned containers."

In both foreign and domestic movements, however, containerization seems to be making progress. Strick Trailers has been actively promoting experimental movements of military freight from U.S. points to bases in Europe in Flexi-Van equipment; and REA Express will inagurate its coast-to-coast container service June 24 (see story on page 27). In addition, increasing truck-trailer heights and, someday, increasing widths may spur further development of container systems. Only about a half-dozen eastern states now bar 13½-foot-high trailers—and, as container advocates are quick to point out, sooner or later these states will fall in line. And, they say, railroad clearances can only be enlarged so much, without prohibitive expense.

● **Ownership trends.** Another trend may be developing in equipment ownership. Trailer Train and North American Car's NITX have shown how successfully pools can operate in supplying piggyback cars. Increasingly, railroads are turning outside for trailer-equipment, too. Roads such as Chicago & North Western, New Haven and Chicago Great Western have gone to leasing—in their case, Berman Leasing Company. Xtra, Inc., has made significant gains in leasing. Louisville & Nashville recently sold its entire owned-trailer fleet to REA Leasing Corp. and leased it back on a long-term basis. And there'll be new entries in the lease field. At least one major supplier is almost set to go with a big push for short-term leasing (by present standards) of rail and highway equipment.

Expansion of containerization and growth of conventional piggyback, however, is dependent upon more than just the availability of efficient equipment. The prime requirement, as some observers put it, is the availability of more knowledge about distribution patterns and needs.

As R. J. Owen, Canadian National system work-study officer noted recently, skimming off the cream of the traffic is one thing—"but when you look at marginal operations, you must have more detailed information on traffic movements to be sure you are right."

● **Awareness needed.** Mr. Owen urges a "constant awareness that the concept of containerization should be considered in the light of total physical-distribution needs." He also proposes the setting up of a clearing house "to provide information for determining what these total distribution needs are."

Motor carriers, CN's work-study officer points out, "didn't steal business from the railroads by some underhanded means. They won traffic by making shippers aware that factors such as inventory costs, damage to goods by too frequent handling and flexibility in shipping schedules were worth hard-earned dollars. When containerization, in conjunction with the best use of available transportation modes, can further improve these over-all costs, its expanded use will be assured."

Competition's role

Organizations of shippers, railroads, motor carriers, ocean carriers, materials handling specialists now exist, Mr. Owen notes: "Why not a physical-distribution association embracing all of these complementary functions?" Is it heresy to suggest that competing carriers cooperate in such a group? No, because "the roles of truckers and railroads will become less competitive and more complementary as the total distribution economics are more fully assessed."

● **Europe ahead?** Europe, Mr. Owen thinks, may be showing the way in some respects: "Registered containers can move anywhere between 17 European and North African countries, charged only for net cargo with empty containers moving at a 90% rate reduction. Pallet pools and container pools are operating to a much greater extent than on this continent. This atmosphere of economic concessions must be expanded if we are to progress."

E. W. Wright, Baltimore & Ohio's general manager, trailer service, sees a half-dozen advantages for container systems—but almost as many disadvantages. On the plus side are the container's one-third saving in weight; its lower center of gravity; its lower height, which minimizes clearance problems; its adaptability to intermodal operations. Further, containers can be stacked; and licenses are required only on chassis or bogie.

Working against containerization, however, are factors involving higher cost; possible administrative headaches arising from separate distribution of chassis and bodies; loading-unloading problems which may crop up at small-volume points; and—perhaps most important now—"motor carriers favor trailers and show no signs of accepting van-size containers, and their standards are important to TOFC progress."

● **How much demand?** Mr. Wright sees an outside firm—neither carrier nor shipper—as the most likely supplier of containers. At present, he believes,

Traffic-building efforts planned by piggyback railroads may produce more solid TOFC trains.

there's little shipper demand for such equipment—and carriers have comparatively little to gain by providing it. But, "since containerization will probably come about, railroads will be well advised to equip their terminals and cars so that containers of varying sizes can be handled when containerization gets off the ground."

Meanwhile, piggyback and container operations are moving closer to each other in the hardware department. Flatcar equipment now available can handle either trailers or wheel-less boxes; Strick is developing a combination Flexi-Van conventional TOFC car.

What kind of volume is available to expanded TOFC-container operations? Estimates vary—but some traffic officers, among them New York Central's vice president-marketing. A. E. Baylis, thinks piggyback-container traffic in 1975 could be 10 times the 1962 volume, or 200 billion ton-miles against 20 billion last year. This increase—to a point where piggyback would account for 25% of total rail ton-miles in '75—would require a 17% per year increase, compounded. That's a slightly higher rate than the one TOFC currently enjoys. But many observers think it's within reach.

Promoting piggyback

This kind of success, however, will require more sophisticated, more analytical approaches to sales-service work. It may also require greatly improved scheduling, greater interchangeability of equipment, more participation by motor carriers in coordinated operations and—shippers are quick to note—availability of service to far more origin and destination points.

● **Attacks likely.** Moreover, if history is any guide, railroad attempts to spur piggyback's growth will be under persistent attack from the outside. Some motor carriers, particularly long-haul lines, are dead set against TOFC. The International Brotherhood of Teamsters is still a factor to be reckoned with—although several states (among them Illinois, Texas and North Carolina) have outlawed union-demanded contract provisions requiring truckers to pay $5 into the IBT welfare fund for each trailer moved in rail piggyback service.

Then there's the ICC investigation—Ex Parte 230 and the ICC-proposed rules which would change a number of current TOFC arrangements and replace the present five basic plans with two.

The record in 230 is already crowded—almost 250 shippers, railroads, motor carriers and others filed special pleadings; 186 filed verified statements; 55 filed verified reply statements, under a timetable set up by the Commission. Thus far, however, there has been no indication of any sense of urgency in getting the proceedings moving. The case could run months, years.

● **Two types of service.** The proposed new rules would set up two basic types of service—joint inter-modal

TOFC (Plans I and V) and all-rail piggyback. Railroads don't particularly object to a change in terminology—but they have raised strong protests regarding restrictions which would be applied.

One provision, for example, attempts to prohibit publication of joint rail-motor rates on commodities where the movement would be exempt from regulation if it were performed entirely by a trucker. Railroads call this an improper interpretation of the Interstate Commerce Act—and, they point out, similar rail-barge joint rates "have been permitted and, indeed, compelled by the Commission and the courts."

Two other proposed rules would provide that railroads could get no greater division of a joint rail-motor rate than they would receive from an all-rail piggyback move between the same two terminal points; and would compel a railroad to enter into joint-rate arrangements with every motor carrier once it decided to do so with any motor carrier. Paul R. Duke, assistant general solicitor of the Pennsylvania, puts it bluntly: Both rules would be "beyond the statutory power of the Commission."

● **All-rail rules.** The big concern, however, is with the rules proposed for so-called all-rail TOFC. These rules, declared Mr. Duke, "would prohibit rail carriers from publishing ramp-to-ramp rates which require a shipper to provide a portion of the equipment used in the transportation. They would outlaw Plan III. Indeed, if the [ICC] Bureau of Inquiry had its way, a railroad could never publish both a Plan II and a Plan III rate, but would have to make a choice between one or the other."

Further, he notes, the proposals "would forbid railroads or their affiliates from leasing trailers to shippers. The only way in which a railroad could move a shipment, where the trailer was supplied by a shipper, would be to publish a rate for the complete service and then give an allowance for the provision of the trailer."

This, Mr. Duke points out, is what motor carriers argued in a landmark Plan III case, and it was what an examiner recommended—but, nevertheless, "this is what the full Commission only 22 months ago said was not the law. The Commission said that railroads could publish rates for ramp-to-ramp movement—rates requiring the shipper to provide the trailer or trailers."

So why the fuss now? Says Mr. Duke: "There are some who now contend that the Commission was not aware at that time that railroads were trip-leasing trailers to be used in conjunction with Plan III rates. This contention is difficult to understand, in view of the fact that the Commission's decision refers to such leasing and, indeed, counsel for the leading motor-carrier complainants in that proceeding agreed that if there was one issue tried to death it was the practice of leasing."

● **'Unproven allegations'** All the talk about Plan III and trip-leasing, Mr. Duke declares, "is based upon unproven allegations that the railroads are giving special treatment to favored shippers through trip-leasing. Despite three extensive investigations of this matter, no one has yet shown an example of where one shipper is getting a better deal than another from a railroad. While different railroads have different methods of handling the leasing, the conclusions from all the evidence which has been developed from the subject is strikingly clear. Each railroad treats each and every one of its shippers the same."

Study of replies to the Railway Age TOFC survey shows clearly why railroad competitors are keeping Plan III under constant attack. For more than a few roads, it's the major source of piggyback traffic now and it's continuing to grow at a faster pace than most other plans offered.

Plan III gaining

One major eastern carrier, for example, operates all five plans—but almost half its volume, almost half its total TOFC revenues stem from Plan III. Another eastern line draws about two-thirds of its TOFC revenues from Plan I—but reports that Plan III is growing at a faster clip. Still a third eastern road pulls 75% of its revenues from Plans I and II, only about 20% from Plan III. Again, however, Plan III is showing the greatest rate of growth.

● **Plan III—90%.** In the South, it's much the same story. Plan III accounts for about 90% of one major carrier's TOFC business. On two other southern roads, it's the plan under which better than half of all piggyback trailers move. And on all three lines, Plan III growth continues to pace TOFC development.

Farther west, the plan's popularity holds up. On one road, Plan III volume and revenue trail Plan I—but III is catching up. On another, it ranks second to Plan II, but III is growing faster. And on a third midwestern line, Plan III accounts for 90% of piggyback volume, and the percentage is still moving higher.

As might be expected, the ICC investigation has brought clearly into the open wide splits among various modes of transportation regarding the various plans.

Freight forwarders and short-haul motor carriers generally are against Plan I. One long-haul truck line—which uses Plan I extensively—advocates rules which would eliminate Plan V. Many long-haul motor carriers would like to see Plans III and IV wiped off the books—and the forwarders are fighting just as hard to maintain them.

The railroads' position has been that no rules should be adopted which would retard development of any of the present forms of piggyback. Most shippers take a similar slant.

● **Management discretion.** It's the railroads' thinking that decisions on going into various TOFC plans are matters requiring exercise of informed judgment on the part of management—and that the Commission "should not restrict the exercise of that managerial discretion by adopting rules that are either unnecessary or inconsistent with the mandates of the Interstate Commerce Act."

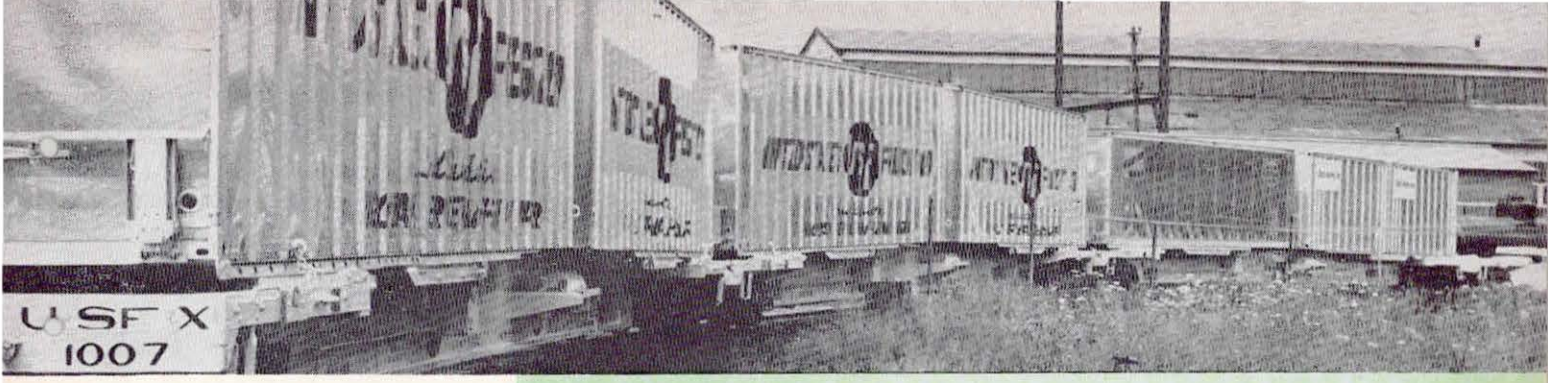
Concern about the ICC probe isn't limited to the lawyers. B&O's piggyback service general manager, Mr. Wright, shares a fear that the investigation could result in a setback to railroad efforts to fight private carriage. Mr. Wright, a motor-carrier officer before joining B&O, points out that "at least two of the piggyback plans are not simply substitutes for either railroad or truck operation, but are a means for adapting the railroad plant to permit a working relationship with private carriage. If the plans are to remain attractive to the shipper, they must leave to him the essential freedoms he enjoys in private transportation."

The proposed rules covering leasing—where leasing would be abolished and the railroad would provide an allowance where the shipper provides his own equipment—"in theory, makes pretty good sense. Practically, it does not."

Mr. Wright notes that allowances must be based on average costs—and these will reflect both above-average and below-average figures. Therefore, the shipper who can provide equipment at less than the allowance will do so; the shipper having greater cost than the allowance will ask for the full service. And the ultimate result will be that "the railroads will perform all of the high-cost service."

● **Flexibility for shippers.** In contrast, he adds, "publication of varying charges for varying services permits each shipper to work out his own costs. Plan III has grown rapidly because it leaves the shipper with the opportunity to shape his own costs and design his own service to and from the railroad facility."

Barring changes in the regulatory atmosphere, most observers see the greatest potential for growth in Plans III and V. And Railway Age's mid-1963 TOFC survey tends to confirm these opinions.



Since 1954, when a landmark ICC decision gave piggyback a clear board, TOFC service has grown at a rate of approximately 20% per year. Indications are that the rate will be maintained over the next few years.

B&O's Mr. Wright, trucker turned railroader, has seen piggyback from both sides. He agrees that Plans III and V hold the most promise for the future. He summed it up this way, at a recent Railway Systems & Management Association conference:

"Some railroaders believe Plan I is bad for the railroad business because it strengthens the trucking industry by handing it the benefits of low-cost line operation. . . . [But] at this point, Plan I is already widespread. The entrance or withdrawal by one railroad or another cannot affect the balance of power. My theory is that as long as we are vigorously competing with trucks in our other TOFC plans, we may as well participate in all of them as long as the specific Plan I divisions are compensatory.

- **Plan II—high cost.** "Plan II is the high cost plan but also offers the best opportunity to compete with motor lines on a full-service basis. Carefully watched and controlled, this plan has high profit potential.

Potential for growth

"One of the biggest, if not the biggest, potentials for TOFC growth is Plan III. This is our big opportunity to compete with private carriage as well as with gray-area operations. Plan III permits the shipper to keep the advantages of private transportation. . . . [It] has enabled the shipper to eliminate in many cases the warehouse handling employed in the past. Plan III matches low railroad line-haul costs with completely flexible terminal handling under the personal control of the shipper. Secondly, by leasing him a trailer, the railroad eliminates his empty mileage.

"Plan IV does not appear to be growing. The complications of trailer and flat-car ownership or leasing appear to hold up general acceptance of the plan.

"The relatively new joint effort of railroads and truck lines—Plan V—poses some questions that are still not answered. The marriage of short-haul

Containerization: Breakthrough Near?

The growth rate of conventional truck-trailer piggyback will very likely flatten out within a few years —but then railroads will catch their second wind quickly and start into a new growth cycle based on greater use of a flexible containerization system.

That's the shape of the future as sketched by Sol Katz, president of Strick Trailers, whose assembly lines turn out the Flexi-Van units in service on such roads as New York Central, Milwaukee, Illinois Central, Santa Fe, Missouri Pacific and Atlantic Coast Line.

Strick has no real quarrel with conventional piggyback. Company designers are now working on a combination Flexi-Van/conventional-TOFC car (and expect to have a prototype built in about three months). Many Flexi-Van units—containers with bogies attached—are being operated in conventional piggyback service. But Mr. Katz thinks a variety of factors will team up to open the way for containerization's long-awaited breakthrough:

- Conventional TOFC, he declares, "is being choked because you can't load and unload fast enough." With the flexibility of a sideloading system, Strick's president contends, there's no problem in getting "hot" trailers unloaded and on their way to the consignee as soon as the train gets into a terminal.
- Only a few states—all in the Middle Atlantic and New England areas—don't now permit 13-foot, 6-inch trailer heights. But "it's only a matter of time—probably a short time—until 13-6 units can be used anywhere," Mr. Katz believes, "and when that happens a lot of railroads are going to have clearance problems."
- Conventional piggyback's strong point is service between high-density centers. But there's tremendous potential for gaining traffic moving between less high-density points, and "this is where you need the flexibility of the container."
- Increases in import-export traffic are turning new attention to container movements—and Strick is pushing hard to show what can be done to speed shipments and minimize handling costs on overseas traffic.

What kind of container system is likely to meet the problems? "Flexi-Van, or something like it," Mr. Katz declares.

His company's move to produce a car which can handle containers as well as standard trailers is one effort to produce more flexibility. It's a move similar to those which other manufacturers have also been working on—to provide a rail car capable of handling various types of boxes, with and without wheels. But Strick regards the upcoming combination car as "strictly an interim unit."

Mr. Katz is also aware of problems which may be created within today's fleet of conventional piggyback cars, when loading-unloading flexibility grows in importance and when higher (and, someday, wider) trailers come into use. His position: Conventional piggyback cars can be modified—"it's feasible and practical"—for Flexi-Van-type operations.

So far as Strick is concerned, the low silhouette of the wheel-less container on a flat car isn't really the system's big selling point. What is? "Flexibility."

Growth of foreign trade, Mr. Katz contends, will also help boom containerization because of the opportunities it offers for minimizing handling at ports. Surveys by a variety of transportation companies, he points out, show that a large proportion of the freight in international trade originates outside the port area and is destined to points beyond receiving ports. Savings would be significant, he argues, if transloading could be eliminated, if warehousing weren't necessary at origin or destination ports, if packing and crating costs could be cut, if inventories could be trimmed by speeded-up shipping methods containerization should provide.

truckers and long-haul railroads obviously makes sense. How about the long-haul motor carrier? Does it have a place? Will the employment of short-haul carriers for assembly and distribution remain effective, or will they become disenchanted with the expense burden involved in this type operation? Does Plan V constitute territorial invasion? My opinion is that this plan gives us the clearance we've needed to effectively compete with the long-haul carrier. We can move volumes of traffic over long distances more cheaply and more quickly than he can. The question of invasion is now academic. Trucking of all kinds knows no boundaries and the regulatory defenses have long since been breached. Our territories have long since been invaded. Plan V is the system whereby we can not only recover traffic lost to long-haul motor carriers, but can also provide the rails with revenue traffic not before available to us."

● **What slows Plan V?** Unquestionably, both the question of territorial invasion and the lingering reluctance of railroads and motor carriers to work together has slowed Plan V development. As one observer comments, "The one thing we know for sure about Plan V is that it's untapped"—even though a great majority of piggybacking railroads offer this plan along with the others. In some cases, Plan V is restricted to TOFC movements of new automobiles—and multi-level rack cars have taken over most of that traffic. In others, Plan V is just getting off the ground—C&O and Southern, for example. And in some instances, though Plan V rates have been in effect for months or even years, there's been no big push by either railroads or motor carriers to promote the plan's development.

Still, at least two railroads—Missouri Pacific and a major eastern road—report Plan V as the hottest item in their piggyback line at present.

Many western lines (plus a few in the South, including A&WP) find Plan II, all-rail piggyback pacing TOFC development. Among the group: Illinois Central, Santa Fe, Burlington, Northern Pacific, Milwaukee, Great Northern, Union Pacific and Katy.

● **Plan I growing.** A few carriers are enjoying their greatest current success with Plan I—including Frisco, Wabash, Pennsylvania, Delaware & Hudson. And then there's the crowded Plan III field. On the list of roads where Plan III is the big one, from a growth standpoint: Reading, Lehigh Valley, New Haven, Erie-Lackawanna, Nickel Plate, Kansas City Southern, C&O, Southern, L&N, Central of Georgia and Detroit, Toledo & Ironton, among the carriers reporting.

A good part of the Plan III business (and, perhaps, most Plan IV traffic) comes from the freight forwarders—some of which have gone over almost entirely to piggyback transportation. Some of these companies—such as the U.S. Freight group—are independent forwarding organizations. But other big ones—including National Carloading and Republic Carloading—are now owned by motor carriers. And some observers think significant strides toward greater coordination of transport modes may grow out of the resulting inter-relationship involving railroads, forwarders and motor carriers.

Other gains—and these could be the big ones, in the long run—may spring from developments abroad. Foreign competition may be the catalyst which brings about coordinated, even integrated, transportation here. The sober declaration that "distribution costs are the one great area left for savings" has almost attained the status of gospel—and most observers agree that it's basically true. If U.S. firms are to compete effectively overseas, if domestic companies are to survive in the face of increasing foreign competition here, the experts contend, transportation costs have to be cut.

● **Cost-cutters.** This means lower rates, less physical handling of freight, elimination of unnecessary warehousing, lower loss and damage claims, better equipment, faster schedules, greater rail-highway-waterway coordination.

Most railroads, many shippers, a number of motor carriers see these improvements coming as a process of evolution—and coming faster if the forces of competition are allowed to work without the application of artificial restraints. Adoption of the ICC-proposed piggyback rules, railroad officers believe, would put just that sort of restraint on development of TOFC and containerization.

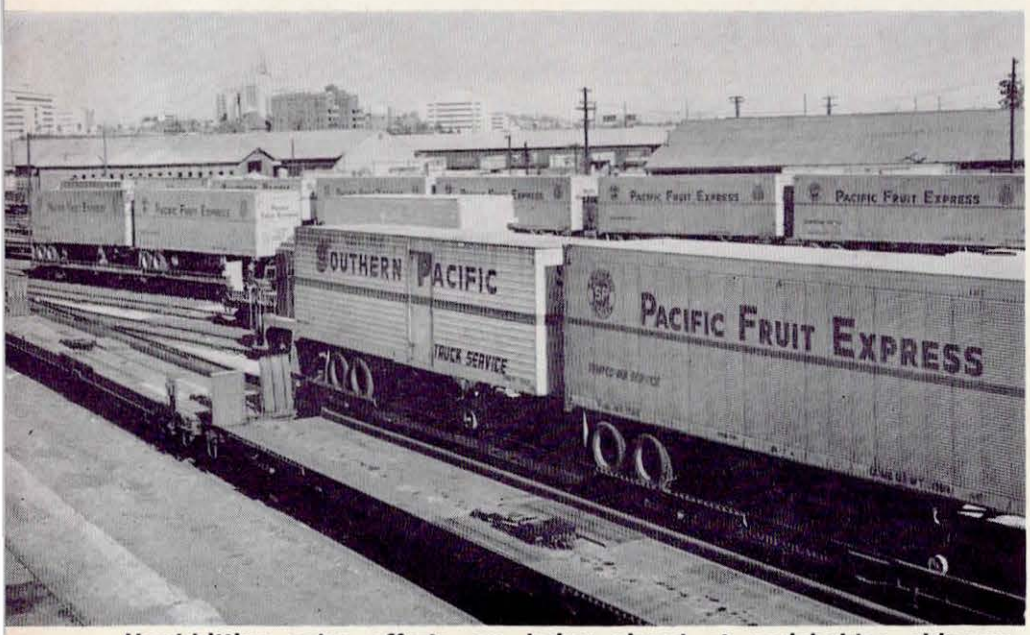
John E. McCullough, Frisco general solicitor, calls Ex Parte 230 "one of the most complex and far-reaching proceedings the Commission has undertaken." With so many varied interests involved, he notes, the case will probably be before the ICC and the courts for a long time.

But the basic question, as Mr. McCullough sees it, is this: "Do we need more regulation through the proposed rules, which we have apparently been getting along without so well for many years?"

● **Piggyback changes.** In any event, 1963 will bow out Dec. 31—barring a miracle—without a decision from the Commission in the piggyback case. And piggyback itself will be a different proposition by year's end—new railroad emphasis on Plan V, growing enthusiasm of motor carriers for setting up coordinated service, increasing attention being paid to containerization, seem to assure that.

It's true that TOFC isn't gaining quite so fast in '63 as it has in recent years—but most observers are looking for a pickup in the second half of the year. And, as NYC Vice President Baylis notes, just a 17% increase per year can put piggyback up to the 200-billion-ton-mile figure in another dozen years.

As railroad men see it—and they're joined by many shippers, many forwarders, a number of truckers—that kind of growth may not come without a fight. But it's worth it.



Hard-hitting sales efforts are being aimed at perishables shippers.

Shippers Eager for Expansion of TOFC

Service should be expanded to cover more points, industrial traffic managers declare. What else do they want? Improved rate structures, greater railroad-motor carrier coordination.

Ask shippers how piggyback service could be made more useful—and then step back to wait for the dust to clear.

If the responses to this month's Traffic Poll are any indication, piggyback —lusty child that it is—is, nevertheless, still a youngster. And industrial traffic managers are free with suggestions as to how the child's growth should be promoted.

Improvements in TOFC rate structures, of course, are a primary concern of many shipper respondents. But even more of them aim their comments at expansion of piggyback service to more points—particularly through rail-motor carrier cooperation and coordination. Their urging is terse and to the point.

● **Rates to more points.** "Rates should be published to apply to more stations, to eliminate the present non-application of rates to many points." —K. A. Anderson, traffic manager, Flour City Architectural Metals, division of Hupp Corp., Minneapolis, Minn.

"Rail-truck joint rates and services should be expanded. We have too many small-town locations which are [now] served much better by truck than by rail."—R. F. Treptow, general traffic manager, H. D. Lee Co., Kansas City Mo.

"Rails and motor carriers should work together to benefit them both—and also their customers."—E. J. Davis, director of traffic, Caterpillar Tractor Co., Peoria, Ill.

Carriers should "increase the availability of origin and destination points." —E. H. Endroll, traffic manager, Hollywood Brands, Inc., Centralia, Ill.

"We need a single service from shipper to consignee's store-door"—Charles D. Van Treese, traffic manager, Orange Products Division, Sunkist Growers, Inc., Ontario, Calif.

● **More Plan V?** There should be "increased usage of Plan V arrangements."—Noel S. Worrell, vice president-traffic, American Zinc, Lead & Smelting Co., St. Louis, Mo. And there should be "a greater number of motor carriers working with the railroads." —Don S. Harwood, traffic supervisor, Central Illinois Public Service, Springfield, Ill.

Finally, there was the response of Stanley L. Parker, traffic manager, The Pacific Lumber Co., Scotia, Calif.: "Piggyback is not available at our shipping locations—so we cannot comment on ways of improving this service." (Mr. Parker, incidentally, was one of several traffic managers to cite the importance, in the future, of container services, either as a principal shipping method or in combination with conventional truck-trailer methods.)

Non-users speak out

Significant comments on improvement of piggyback come from shippers just starting with TOFC or not using it at all.

J. W. Cassell, district traffic manager, Reynolds Metals Co., Sheffield, Ala., is in the former category. His note: "Plan V has many possibilities, particularly from the service angle to and from smaller towns."

R. S. Callahan, traffic consultant, R. S. Callahan Associates, Holyoke, Mass., says his clients are not now using piggyback. He proposes a one-plan system "for shippers and motor carriers and freight forwarders, free of any specific mixture provisions, without unjust discriminations, undue preferences or advantages. One strong plan will help to widen markets and promote adequate, economical and efficient service and foster sound economic and financial conditions in the railroad industry."

● **Nationwide service.** Robert J. Tyler, general traffic manager, Tube Turns Division of Chemetron Corp., takes a similar slant. The shipper, he says, "needs a nationwide piggyback service under uniform rules with rates on the same level as those provided for motor carriers and forwarders."

Service aspects—and rail-truck coordination—are also touched upon by such industrial traffic men as L. F. Van Kleeck, traffic manager, Brown Co., Berlin, N.H., who calls for "wider distribution facilities"; W. J. Morrison, assistant director of traffic, Scovill Manufacturing Co., Waterbury, Conn., who urges "broader application of serv-

JUNE TRAFFIC POLL

PROPOSITION

Piggyback continues to grow, largely because of the time and effort and money invested (by carriers and industrial traffic officers) to provide a service tailored to need. Piggyback's future growth will depend largely upon continuation of this "investment." High on the list of points which must be considered are ways in which TOFC can be made more useful — and ways in which it can be adapted to possible changes in distribution requirements.

QUESTIONS

(1) Does your company now use piggyback or container service for any part of its transportation requirements?
Yes....66% No....34%

(2) In your opinion, what further refinements in piggyback technique — service, rates, equipment, or any other phase of TOFC operation — would make piggyback service more useful to you?
Service (greater railroad-motor carrier coordination, availability of service at more points) 47%
Improvements in rate structures 40%
Improvements to equipment (standardization, greater availability, provision of more specialized equipment) 13%

(3) From a standpoint of equipment, which form of road-and-rail "marriage" would best serve your shipping needs in the years ahead, as you forecast them today?
Conventional truck-trailer piggyback 53%
Combination of trailer and container service 40%
Container service 7%

ice"; M. J. Garofalo, traffic manager, Armstrong Paint & Varnish Works, Inc., Chicago, Ill., who thinks piggyback should offer "the same service and flexibility as motor carriers do"; and D. G. Farris, general traffic manager, Devoe & Raynolds Co., Inc., Louisville, Ky., who calls for stepped-up participation by railroads in piggyback operations—and also urges the carriers to "step up schedules to reduce time in transit."

Another angle to service—equipment availability—drew comments, general and specific, from several shippers.

F. R. Adams, traffic manager, Olin Mathieson Chemical Corp., West Monroe, La., would like to see more carrier-owned trailer equipment made available. Orrin D. Burt, traffic manager, Parke, Davis & Co., Detroit, Mich., thinks piggyback could be more useful if trailer-container equipment were standardized to permit greater interchangeability.

● **Equipment needs.** Other shippers' needs are specific: More insulated, temperature-controlled equipment, for Mr. Van Treese (Sunkist); and installation of damage-prevention devices in trailers, for Phillip T. Catalano, traffic manager, Steelcase, Inc., Grand Rapids, Mich. Mr. Catalano wants a service which will permit shipment of furniture items uncrated but wrapped in furniture blankets.

A number of shippers replying to the Poll recommend an overhaul of piggyback rate structures, to one degree or another.

Carriers and industrial traffic men "should bring forth a reasonable scale of rates to be applied to this type of service," says F. L. Partridge, executive secretary, Burlington Shippers' Association, Inc. "Currently," he adds, "the rates are a hodge-podge."

Keith M. Brown, assistant traffic manager, Spreckels Sugar Co., San Francisco, Calif., thinks the carriers should publish "a flexible rate structure, including 'incentive' rates." Piggyback service at competitive rates, he points out, "could serve off-rail customers as well as on-rail customers who are unable to receive full carload minimum weights due to a shortage of warehouse space or the size of their business. This tonnage is now handled by truck."

R. J. Garrison, traffic manager, A. B. Dick Co., Chicago, Ill., calls for "more advantageous rates and minimum weights to convert large LCL shipments into stop-off piggyback shipments." The weight question also drew comment from a non-user of piggyback, James H. Vaughan, traffic manager, Chittenden & Eastman Co., Burlington, Iowa. Minimum weights on furniture, Mr. Vaughan declares, "are too high in comparison to carload minimum structures—thus making piggyback movements too prohibitive at this time."

● **Cost pricing?** W. J. Edmonds, general traffic manager, Granite City Steel Co., Granite City, Ill., thinks piggyback "should be priced on costs rather than on competition." Leonard Borman, traffic manager, Carson, Pirie, Scott & Co., Chicago, Ill., proposes making "carload rates and weights interchangeable with piggyback." D. B. Goodwin, traffic manager, Burroughs Corp., Detroit, Mich., wants Plan III rates "inaugurated on transcontinental service." And B. A. Fred, general traffic manager, Griffin Pipe Products Co., Wheaton, Ill., believes the carriers "must be more aggressive" in matters concerning rates and also service and equipment. His point: "In my experience, the industrial traffic manager has always had to be the instigator of TOFC service, rates or equipment."

Service, price

Two shippers—Robert L. Travis, traffic manager, S. D. Warren Co., Cumberland Mills, Westbrook, Maine, and D. C. Ward, transportation manager, Hoerner Boxes, Inc., Keokuk, Iowa—bring home the competitive problems railroads face in expanding the business. Mr. Travis finds truckload service superior; and, he adds, his company is also a carload shipper "and until TOFC rates approximate carload rates, they will be of little use to us." With Mr. Ward, piggyback is strictly a matter of service and price: "We use TOFC when the service is comparable, or nearly so, to truck service and the cost is the same or less for customers now served by truck. Anytime this situation can be brought about and particularly when the service is equal to truck service and the rates are less we, of course, are potential customers."

Wayne S. Franklin, general traffic manager, Brown - Forman Distillers Corp., Louisville, Ky., sees need for a number of changes in piggyback technique: elimination of 60/40 mixture rules on Plan III shipments "so that each commodity can travel on its own with rates published on a cost-of-service basis"; discontinuance of Plan III trailer leasing; greater standardization of TOFC equipment to minimize interchange problems. Like many other respondents, he calls for expansion of "joint rates and services so that other than key-point shippers and receivers could have the benefit of the flexible service provided by Plan V operations."

● **Shippers' hope.** And for the future? Shippers hope, says Mr. Franklin, "that no one loses sight of the reason for the present growth of piggyback—and that the service will be preserved as the volume of this type of traffic continues to grow."

Based on replies from shippers participating in this month's poll, piggyback's future development—for some time, at least— will be mostly in conventional trailer-on-flat-car operations.

Traffic managers were asked which type of equipment would best serve their needs in years ahead, as those needs are projected now. Conventional TOFC, said better than 53%; a combination of trailer and container service, said 40%.

Despite the strong vote for conventional systems, however, many shippers voice enthusiasm for the potential in containerization. Mr. Cassell (Reynolds Metals) notes that containers "offer splendid advantages to many shippers." Mr. Worrell (American Zinc, Lead & Smelting) sees "an ever-increasing trend" to containerized shipping methods, both in road-rail and in carload services—this "despite the reluctance of industry generally to accept such practices."

Several traffic managers believe container service will give small-volume shippers a chance to make greater use of coordinated transport methods.

● **Small-volume problem.** Mr. Borman (Carson, Pirie, Scott) notes that "not every shipper has large enough shipments to use piggyback." Roger Trittelwitz, traffic manager, Durkee Atwood Co., Minneapolis, Minn., thinks that availability of both container and trailer equipment, particularly for small-volume shippers, "may encourage greater use of piggyback."

Several other shippers emphasize the need for flexibility, for service that can be adapted to changing needs.

"Varied customer receiving methods and facilities dictate the need for varied shipping methods and facilities," says Mr. Brown (Spreckels Sugar). Mr. Van Kleeck (Brown Co.) agrees. "Both conventional truck-trailer and container service," he says, "should be available to meet requirements as they develop."

For many shippers, no one form of road-and-rail service can do the whole job. As Mr. Morrison (Scovill Manufacturing) points out, "Ours is a combination business of mill products which fill a trailer and manufactured products which can use containers."

● **Trailers, not containers.** Only one respondent sees little hope for growth of containerization. Mr. Callahan (R. S. Callahan Associates) believes "conventional truck-trailer piggyback service appears to be the most practical form of road-rail service."

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Red Walker discusses grain doors at left, and inspects outdoor grain door storage bin above.

Proper Steel-Corr installation procedure is discussed with the cooper in photo at left (above). Red continues grain door program planning in the shed at trackside.

535

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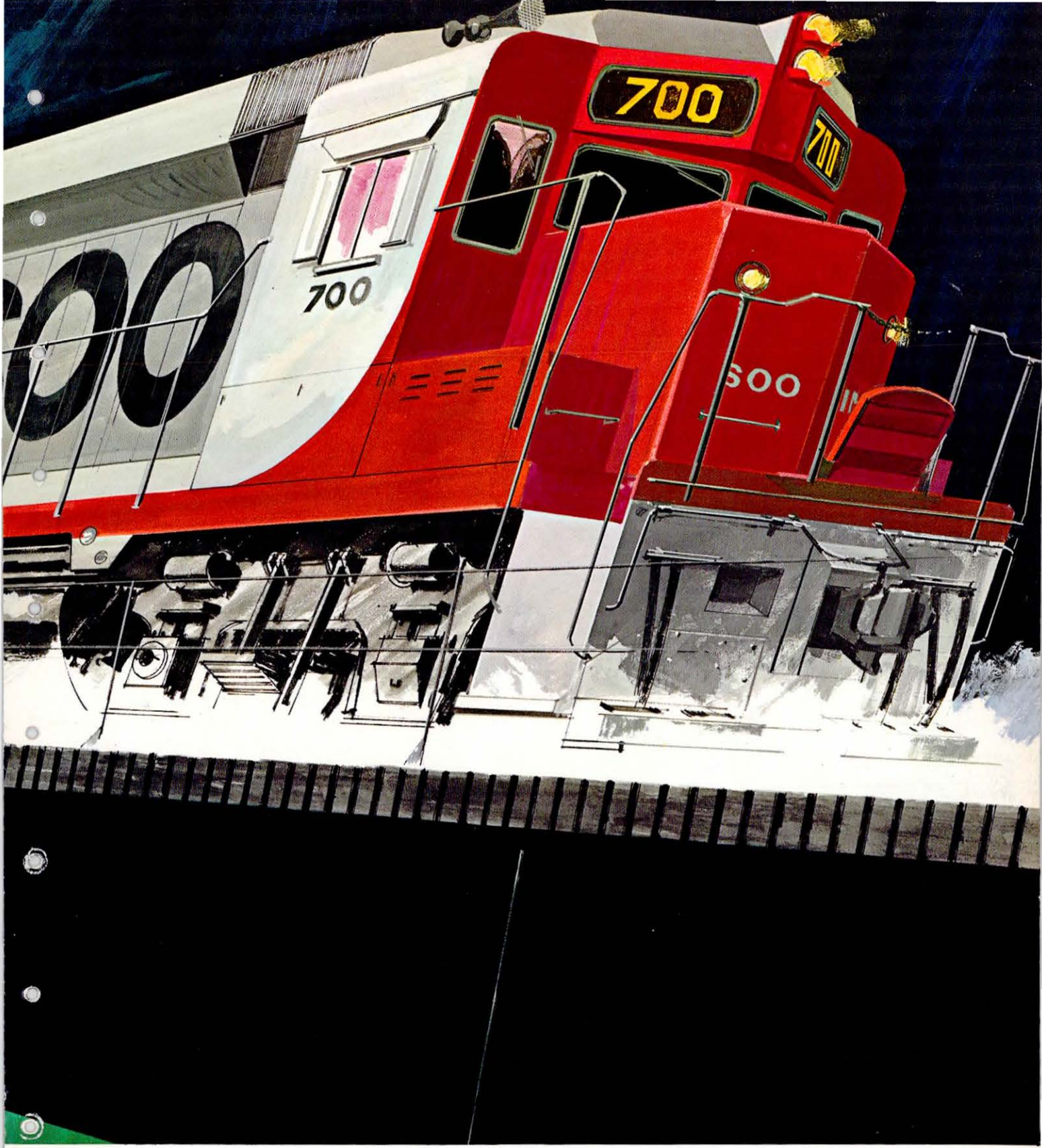
On the Soo . . .
the Revolutionary GP-30



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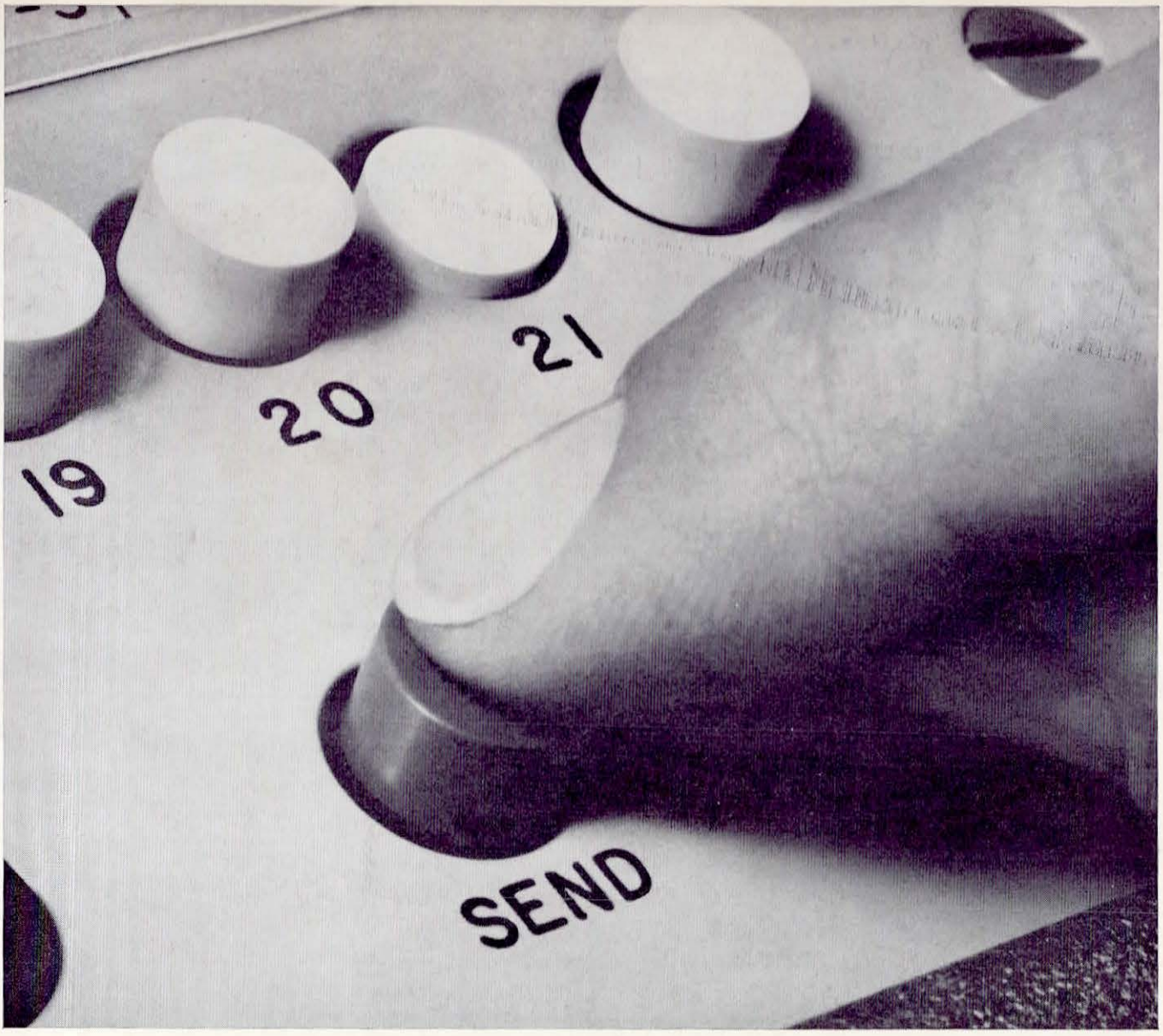


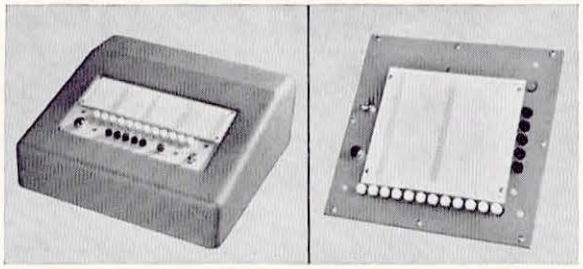
any time, any station

The Stromberg-Carlson Dispatcher Tone Signaling System allows an operator to signal, selectively, any one of 60 stations on the circuit at any time.

This one-way selective system is a most modern, effective means of contacting, conversing with and collecting data from way stations. The operator simply selects the desired carrier and ringing frequencies, then transmits. Continuous monitoring at the control point allows way stations to report data at any time.

The transistorized signaling equipment can be used on open-wire lines, cable, carrier channels or radio circuits. The system can be arranged for remote control of VHF transmitters, signals, motors and other functions.

Full information on the Stromberg-Carlson Dispatcher Tone Signaling System is available from Industrial Sales Department, 128 Carlson Road, Rochester 3, N. Y.



This compact console (6½" high x 14½" wide x 14½" deep) contains dispatcher's control equipment. The white keys select carrier frequency; black keys select ringing frequency; red "send" key transmits tone signal to desired way station.

Dispatcher's panel unit is available for installation in the same opening as a 62-A Key Sender. The unit mounts horizontally in a desk or vertically as in a PBX face panel. Operation is similar to control unit. Size: 8¹³⁄₁₆" high x 10½" wide x 7¾" deep.

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IT'S TRANSCONTINENTAL

REA Starts New Container Moves

New York-Oakland small-shipment service provides fourth-day delivery, coast-to-coast.

REA Express transcontinental container service is scheduled to start today, June 24, with four 20-foot containers heading west from New York on New York Central train No. 13 and another quartet of boxes coming east from Oakland, Calif., on Southern Pacific train No. 22.

● **Five railroads involved.** Under the schedule set up by REA and five participating railroads, containers will move westbound via NYC to Chicago, then on to Omaha, Neb., on Rock Island No. 9, from Omaha to Ogden, Utah, on Union Pacific No. 7 and from Ogden to Oakland on SP No. 21.

Eastbound, movements will be routed SP No. 22, Oakland-Ogden; UP No. 8, Ogden-Omaha; Burlington No. 4, Omaha-Chicago; and NYC No. 4, Chicago-New York.

Schedules will be operated daily except Sunday in each direction. They'll permit fourth-morning delivery westbound, fourth-afternoon delivery eastbound.

● **It's 'Unit-Haul.'** REA announced its coast-to-coast container plans last January (RA, Jan. 28, p. 15). Since then, the express company has been assembling the equipment—C85 container cars from General American, containers and delivery units from Kentucky Manufacturing Co., Side Loader units from Dempster Brothers, Inc.—and putting it through tests. The service will carry the REA designation "Unit-Haul"—and, the express company says, its inauguration on a six-day basis is fully justified by present volumes of small-shipment traffic.

Westbound, the service will operate this way: From New York, two containers will be loaded with San Francisco freight, two with shipments destined to Oakland, San Jose and San Carlos, Calif. They'll move direct westbound, with the longest stopover a 4½-hour period in Chicago. Containers leaving New York at 10:40 p.m. on a Monday, for example, will arrive in Oakland for over-the-road delivery at 1:45 a.m. Friday.

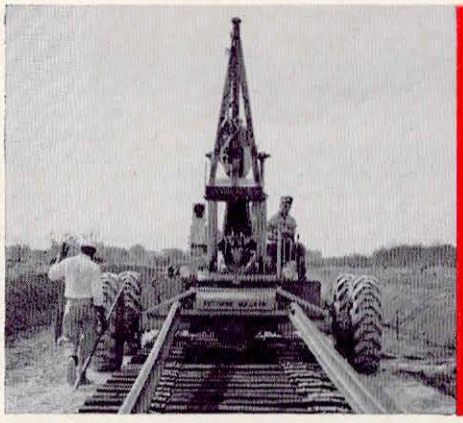
● **Stop at Chicago.** Eastbound, the operation will be a bit different. Oak-

(Continued on page 35)

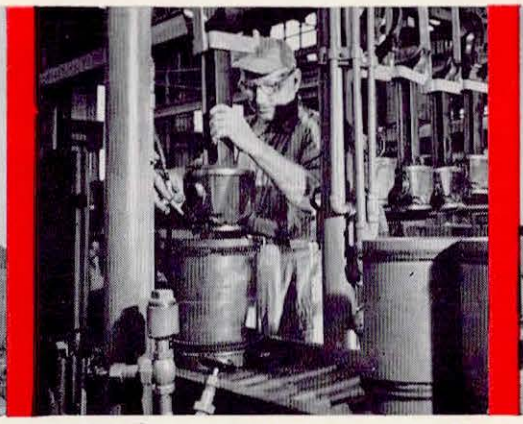
TRANSFER from car to highway delivery unit can be made in less than two minutes. Side Loader is brought parallel with C85 car, and highway truck is driven beside Side Loader. Bolsters on car, Loader, and truck are aligned, although slight misalignment does not make transfer impossible. There can be gaps of two feet between the bolster ends. Hydraulic leveling jacks give proper vertical alignment between Side Loader and unit with which it is working. The spring-loaded bails are extended first to pull the container on to the Side Loader and then to push it to the highway delivery unit. Bail platforms are driven by rack and pinion which makes it possible to extend them beyond sides of Side Loader.

How MOPAC meets the

MOPAC RECEIVED DELIVERY of 100 new and more powerful locomotives in 1962, placed orders for 56 more . . . also ordered more than 3,000 new freight cars in the past two years—most of which are specially designed to meet the changing needs of shippers—and made sweeping improvements in shops, yards, track, offices and communications.



WELDED RAIL DISTRIBUTOR, adapted from standard Speed Swing, has wide track, big tires and 4-wheel steering to facilitate placement of 1440-foot welded rail. In 1963, 100 miles of new rail and 95 miles of relay rail will be laid.



AUTOMATED ASSEMBLY of pistons and rods is feature of Little Rock diesel shops. Rods ride on carriers hanging from monorail, are dropped into piston carriers for pin installation. Good PM practice reduces operating expense sharply.

CLIMBING THE RAMP, Missouri Pacific Freight Transport Company piggyback unit symbolizes the railroad's expansion in truck-rail service. In the course of building this service, MoPac has established

challenge of modern railroading!

Furthers broad improvement of roadway and equipment in the rapidly expanding area it serves.

Radiating a new vitality throughout its 11,000-mile system, Missouri Pacific is taking advantage of the latest developments in railroading. MoPac is modernizing, streamlining to provide the best possible service for passengers and shippers, to compete more intensively for business and to meet demands of the growing economy in its midwest, south and southwest territory.

The short-range tactic: spend money to cut costs, step up service. Physical improvements to roadway and equipment totaling $74,000,000 in the past two years trimmed operating expenses last year while revenues climbed.

Long-range strategy is designed to continue to boost service, revenues and efficiency. MoPac has armed itself with new incentive rates, increased the frequency and speed of its Red Ball freights, is vigorously promoting piggyback service and, in cooperation with the Texas-Pacific and Southern Pacific, has inaugurated second-day delivery from St. Louis to Los Angeles. With 552 new industries or expansions in the MoPac area in the past two years alone, the line should see a continuing payoff from its militant march toward increased traffic and profitability.

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Mobil lubricants, Mobil diesel fuels, and Mobil experience play a prominent part in the operation and maintenance of railroad rolling stock. Here are some of the ways in which Mobil may be able to help you:

PRODUCT—Mobil products have proven themselves in years of actual performance on America's leading railroads. They're always of highest quality . . . uniformly consistent.

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SPECIAL PERSONAL SERVICE—Mobil research laboratories assist customers with specific problems involving application of products.

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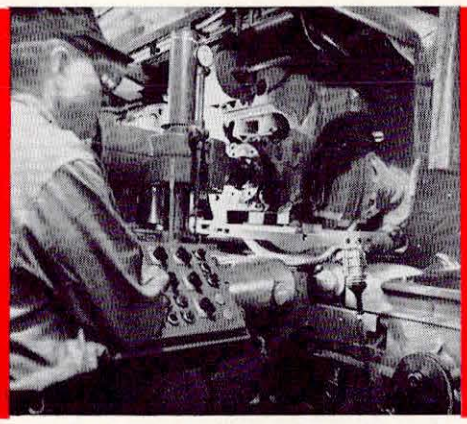
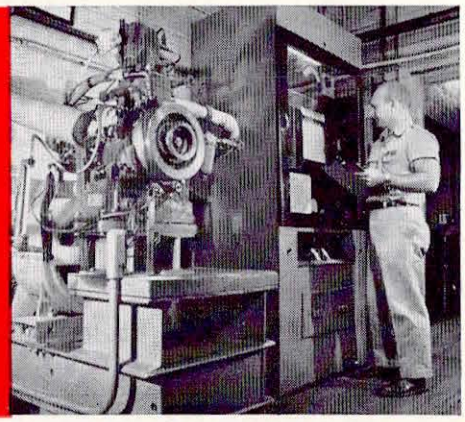
TECHNICAL INFORMATION—Mobil freely distributes technical information to interested railroad personnel. Both the pros and cons of technical problems are thoroughly and frankly presented.

SUPPLY POINTS—Location of 13 refineries and 20 product-compounding plants provides convenient supply.

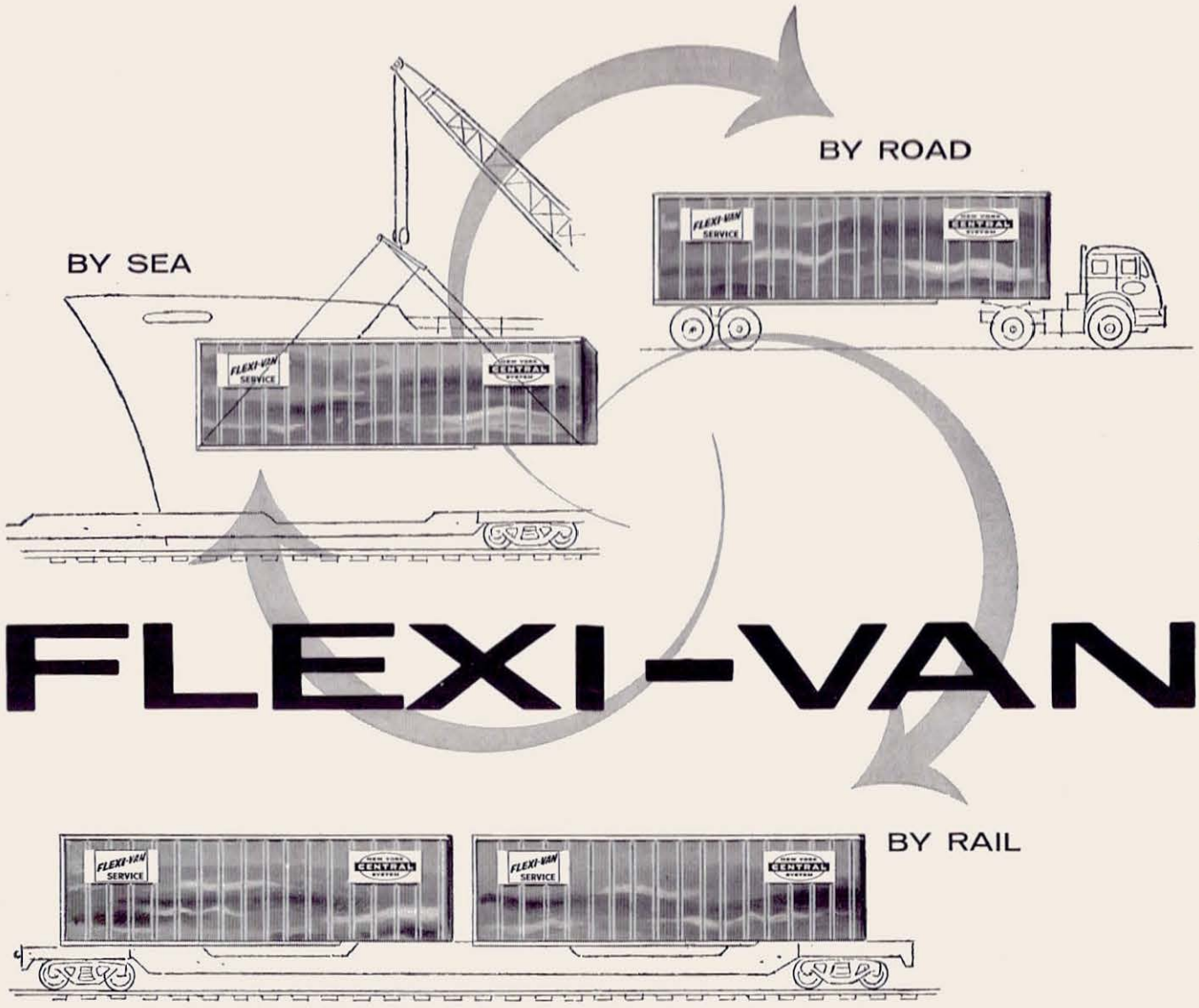
interchange with some 300 motor carriers, providing joint service in MoPac territory. In addition to serving the fuel and lube requirements of the railroad, Mobil supplies the truck fleet needs, too.



WHEEL TRUING is accomplished without demounting, on a Standard Wheel Truing machine. A new wheel shop will be built at North Little Rock this year, where all wheel maintenance for the system will be carried out.



SINGLE CYLINDER LAUSON utilizes special fuels, precise temperature controls . . . runs 60 hours per test in continuing evaluation of diesel engine lube oils. Mobil has supplied MoPac with fuels, oils and special products for many years.



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It's true that this record heavyweight shipment is unusual. But, handling long and heavy cargoes isn't at all new to L&N. We've handled electric generators, 200-foot steel bridge girders, and twice, earlier this year, we handled oil refinery vessels in shipments of 1,064,000 pounds each.

No matter how unusual your shipping problems are, you can depend on L&N know-how and capability to provide the solutions.

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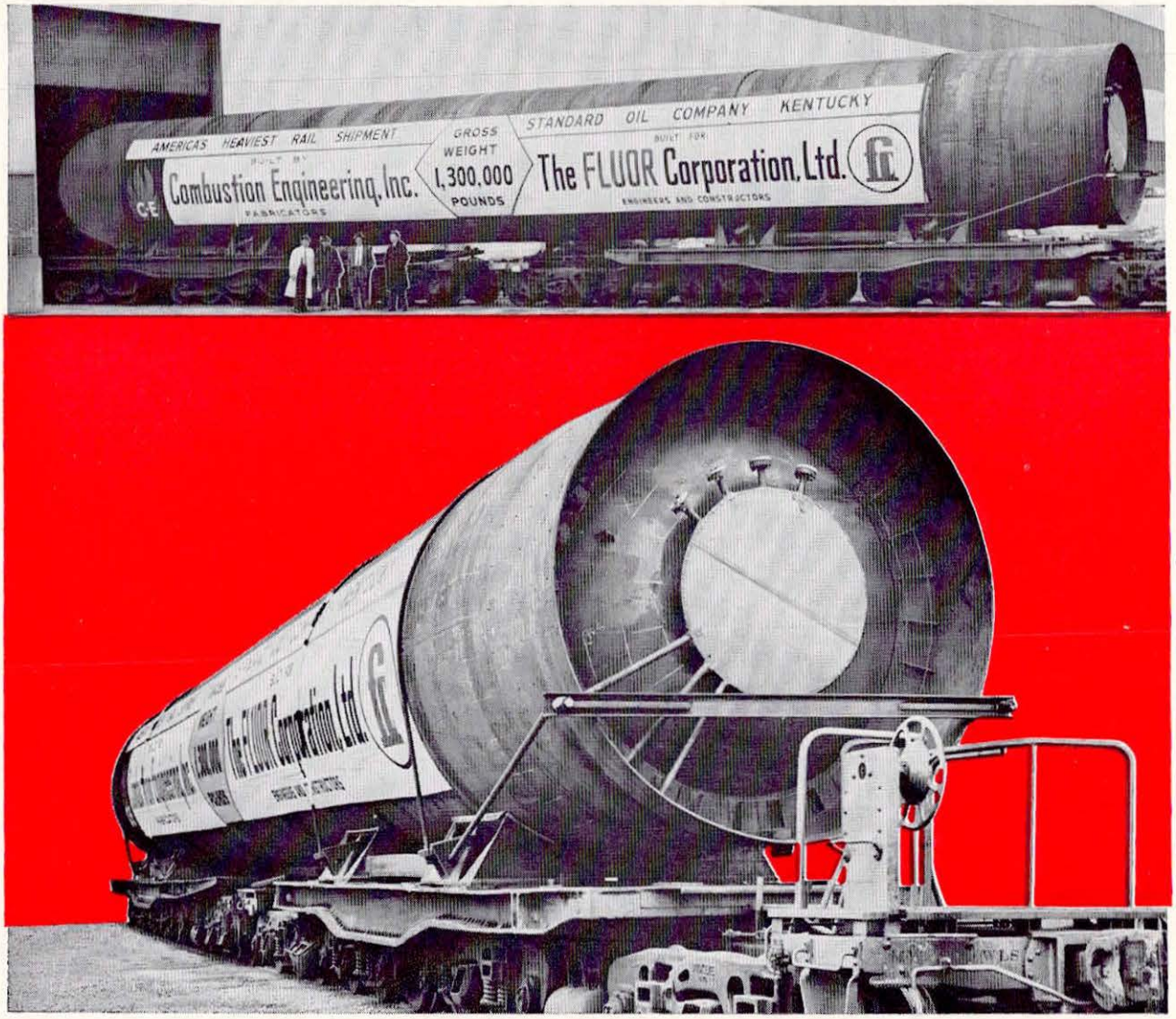

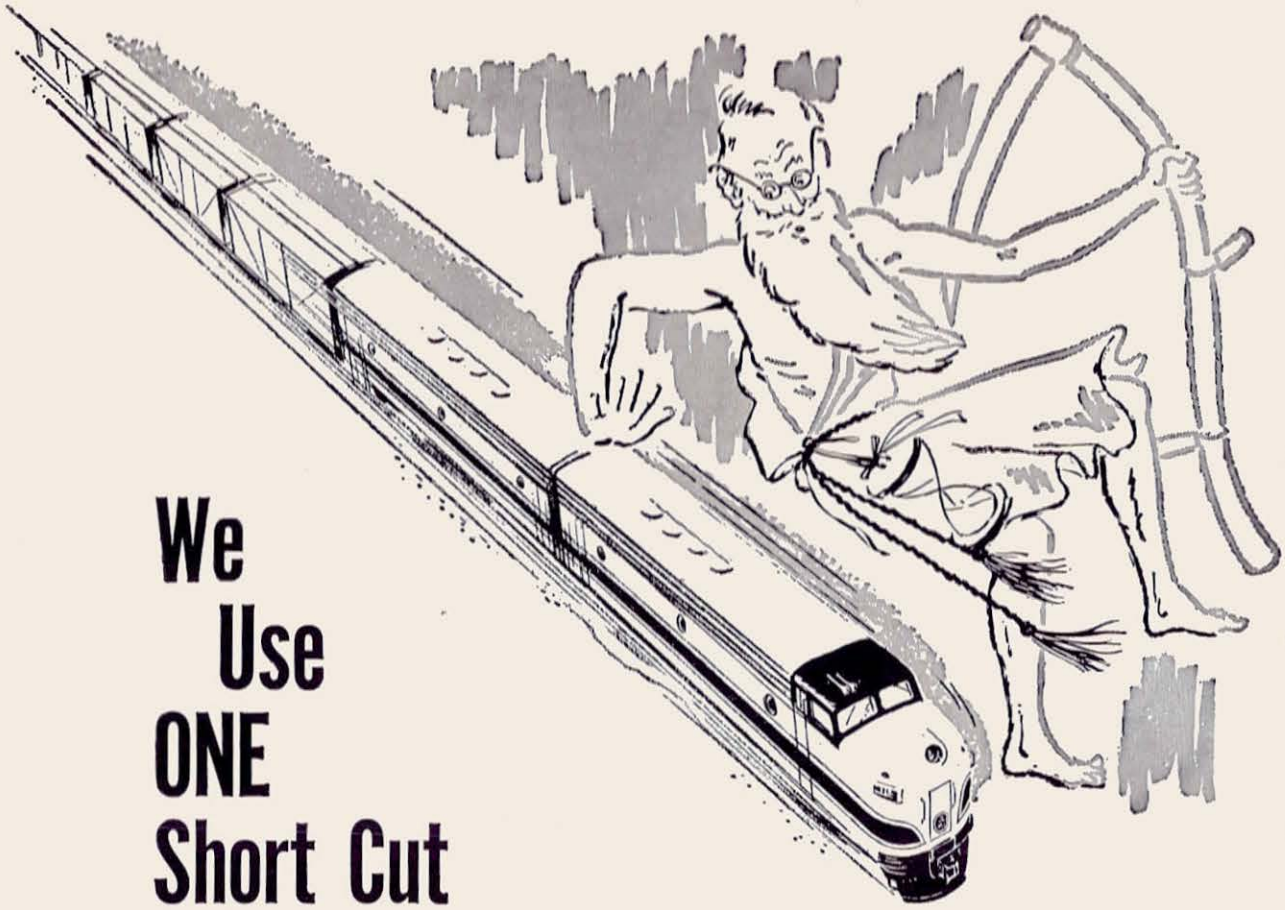

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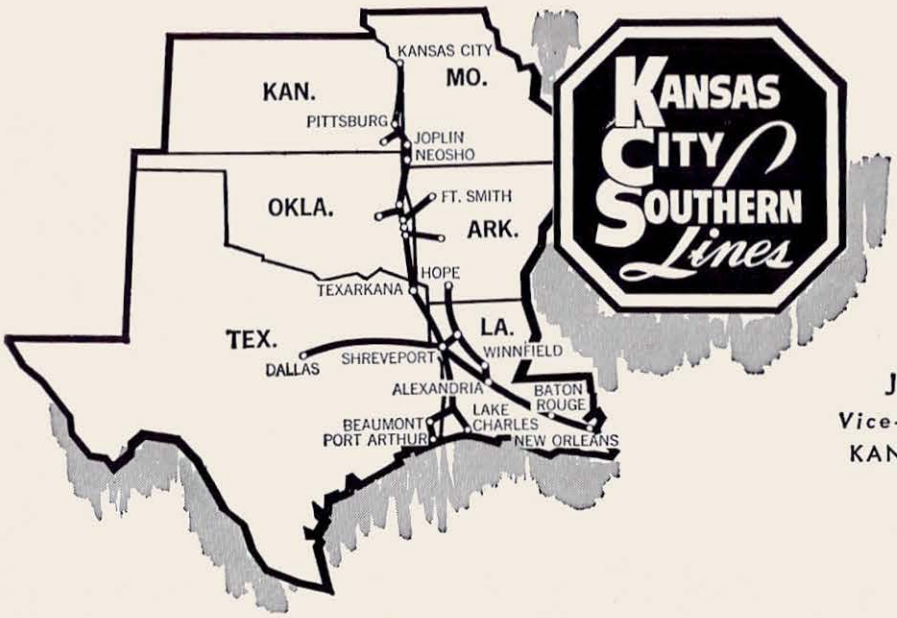
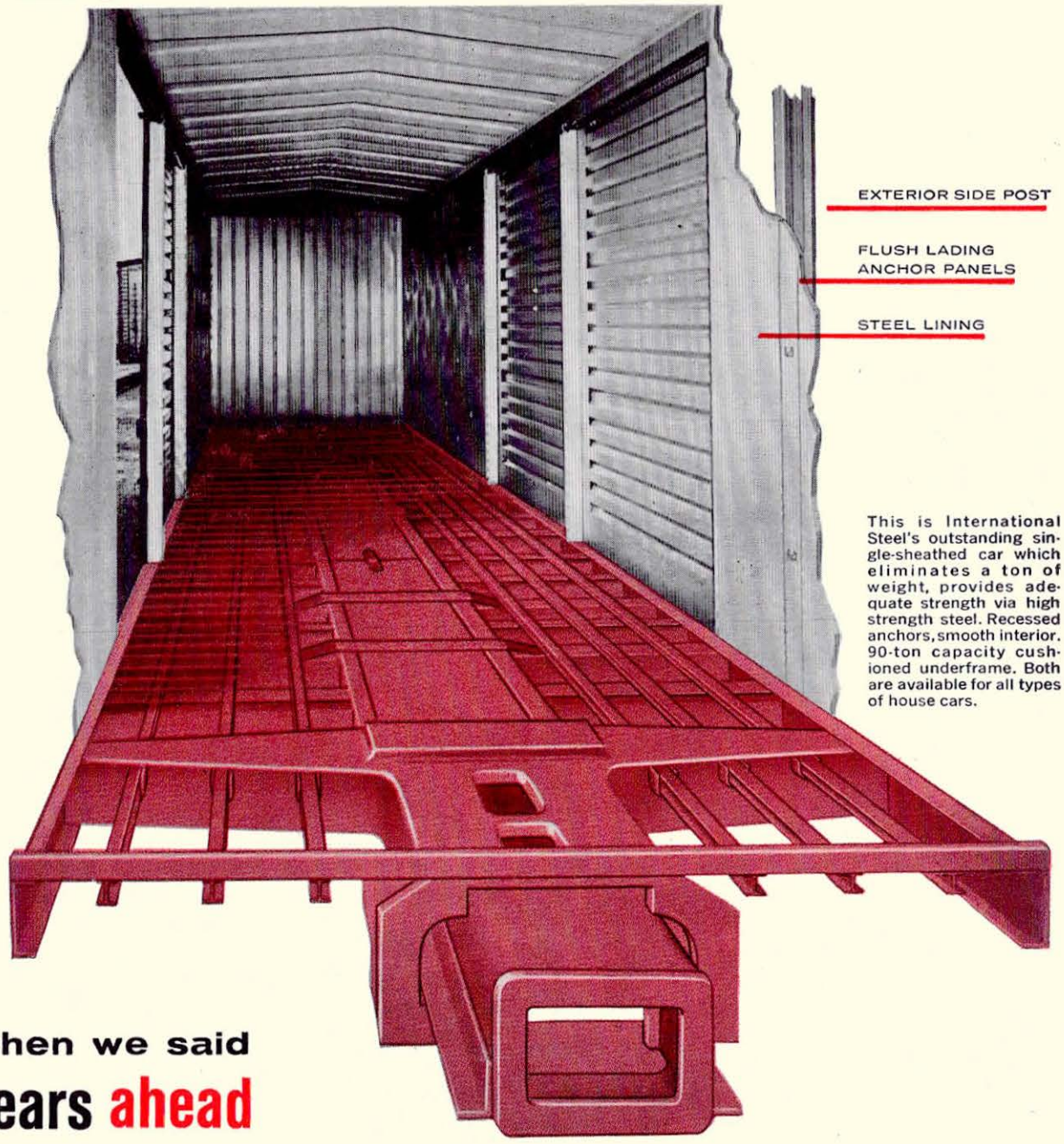
Short cuts, generally, are not in our book, but we have one that helps us to give faster service—the short cut our line takes between Kansas City and the Gulf!

It's the one short cut we recommend for shipments to or from the five ports we serve—New Orleans, Baton Rouge and Lake Charles, La.; Port Arthur and Beaumont, Texas.



J. W. SCOTT
Vice-President—Traffic
KANSAS CITY 5, MO.

this is what we meant...



This is International Steel's outstanding single-sheathed car which eliminates a ton of weight, provides adequate strength via high strength steel. Recessed anchors, smooth interior. 90-ton capacity cushioned underframe. Both are available for all types of house cars.

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Because we were designing for today's requirements 10 years ago, we are producing 50 to 90-ton capacity underframes with various cushioning devices on a production-line basis for delivery **today!**

But, because we're **still** designing 10 years ahead, 50 to 90-ton is not **our** capacity. Double it, if you will; we have it on the drawing board and can put it into metal for you.

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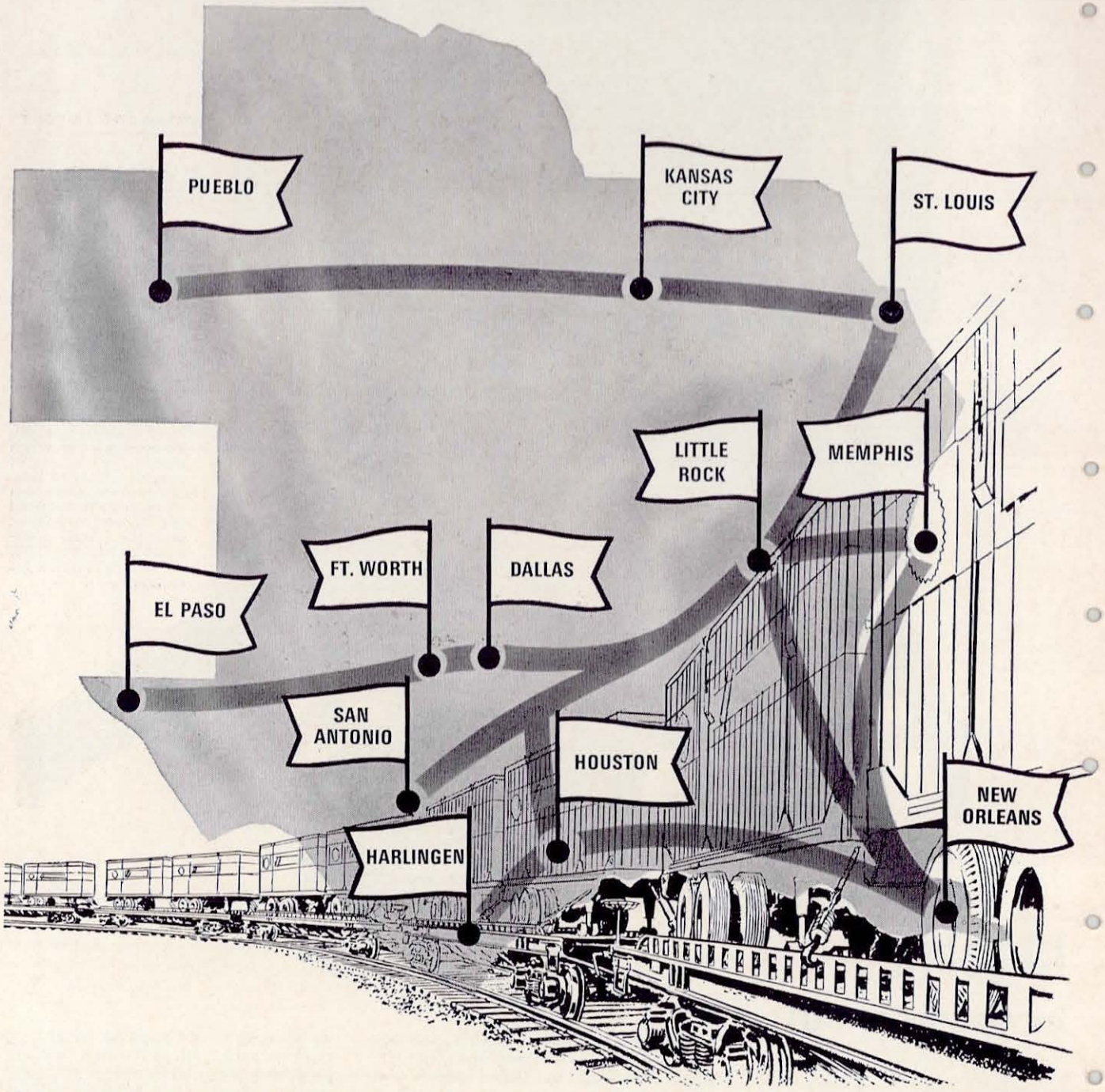

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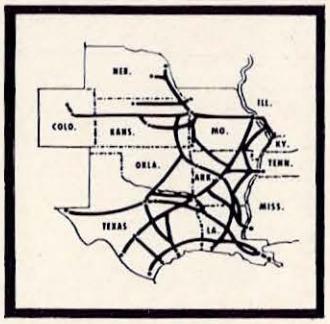
Under Plan 5, joint rail-motor rates with motor carriers are offered from the Atlantic to the Pacific—Canada to the Gulf.

New and improved rail and highway equipment is constantly being added to our rapidly-expanding piggyback fleet. Don't wait. Call your nearest Missouri Pacific or Texas & Pacific Freight Representative. *He's a transportation specialist!*



MISSOURI PACIFIC—TEXAS & PACIFIC

REA Starts New Service

(Continued from page 27)

land will load four boxes, two for Chicago, two for New York. The two containers with Chicago freight will be unloaded there and replaced by two containers with Chicago-to-New York shipments. Containers leaving Oakland at 11:05 p.m. on a Monday will arrive in Chicago at 7:50 a.m. Thursday. Oakland-New York and Chicago-New York boxes will then depart Chicago at 6 p.m. Thursday and arrive in New York at 6:50 p.m. Friday.

The container program, coupled with use of special equipment for side-loading, the express company says, "will enable REA to serve off-rail locations by over-the-road service from the nearest rail head by transferring one container unit instead of handling the traffic loose."

● **Handling eliminated.** "For example, containers loaded in New York destined to San Francisco will be transferred at Oakland to trailer chassis and hauled direct to destination, eliminating the physical handling of the traffic at Oakland."

At the start, the service will be confined to New York-Chicago-Oakland moves. But REA anticipates that it will be expanded "in the near future, as the over-all objective of the program is to improve our service through the elimination of costly, unnecessary piece-handlings—which will also improve in-transit times of our traffic between these points."

Key to the system is the Dempster Side Loader unit. The transfer device itself consists of two bolsters with guide channels under which are installed hydraulic leveling jacks at the front and rear of the chassis frame. Two traveling bail platforms, mounted in assembly guides, are driven by a reversible motor through a speed reducer.

● **Jacks level unit.** The Side Loader operator aligns his unit with the rail car or trailer chassis on which the container is loaded, using the leveling jacks to bring the unit to proper height. Platforms containing the spring-loaded bails then move out, engage hooks under the container and draw it onto the Side Loader. Opposing bails complete the transfer by pushing the container onto rail car or trailer chassis.

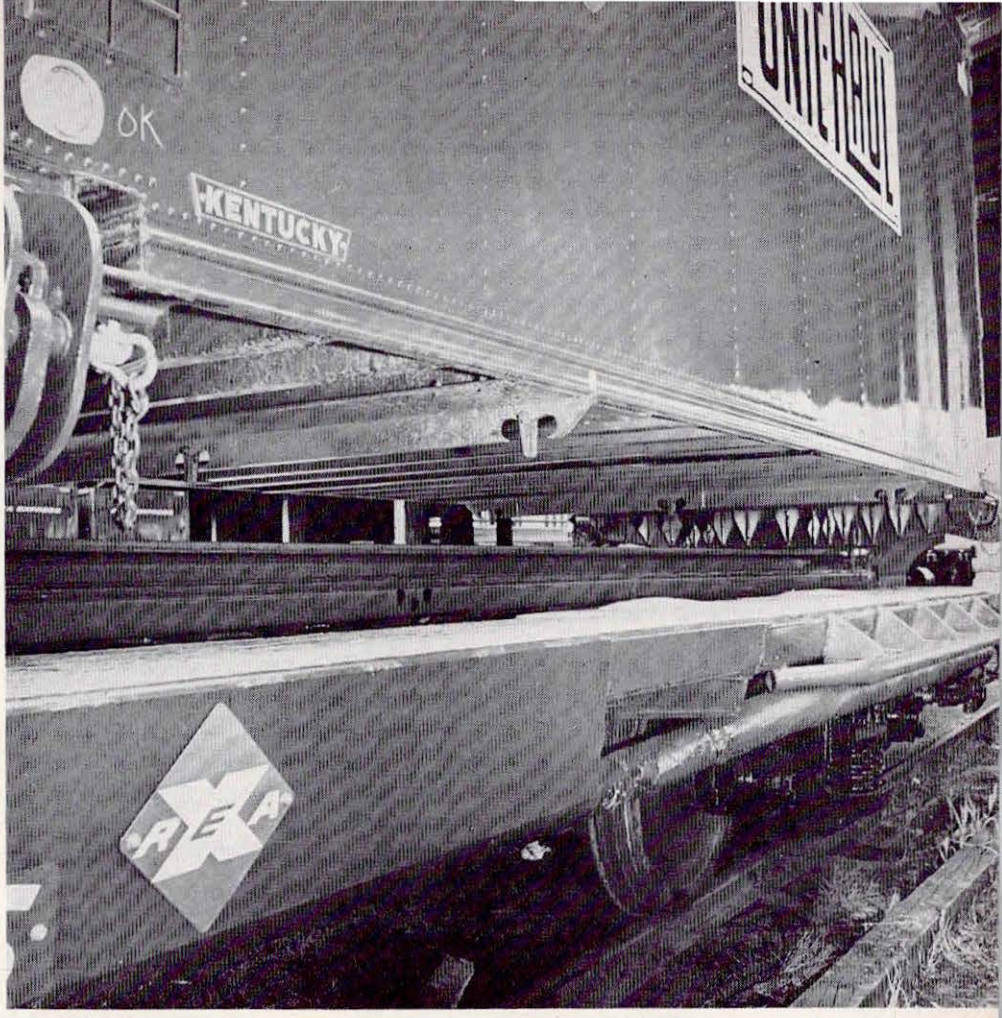
By raising the truck frame with the hydraulic jacks, the unit can also set the container on legs for loading, unloading or storage purposes.

According to REA, use of the Unit-Haul system can result in a 75% reduction in shipment piece-handlings between origin and destination terminals—and can speed deliveries to consignees by as much as 24 hours.

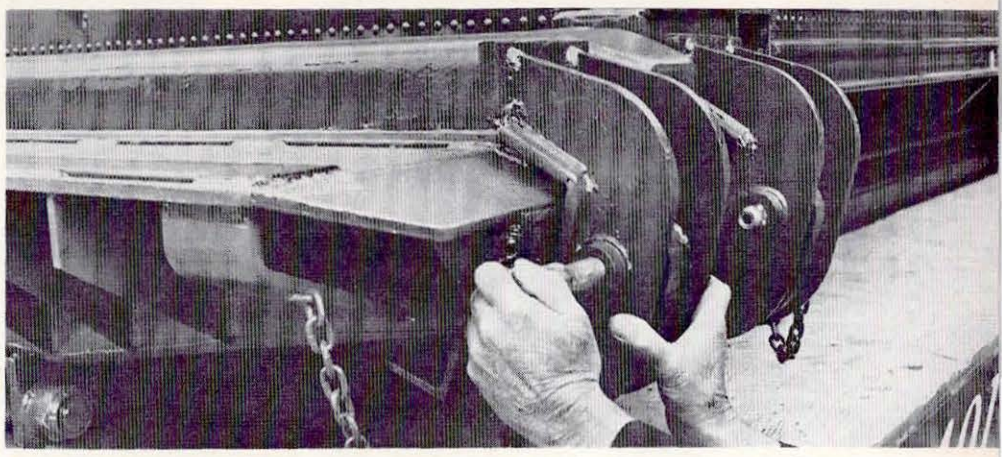
(The coast-to-coast container operation is one of three container-on-passenger-train moves planned by REA. The others—using 8x8x5-foot boxes—involve daily New York-St. Louis and St. Louis-Los Angeles moves.)

● **Flexibility stressed.** REA makes a major point of the flexibility provided by the system. Containers, the company notes, can be handled with equal ease on rail cars, highway vehicles or ships. Transfers can be effected by the Side Loader, overhead crane, mobile straddle carrier, ship's gear or shore-based cranes.

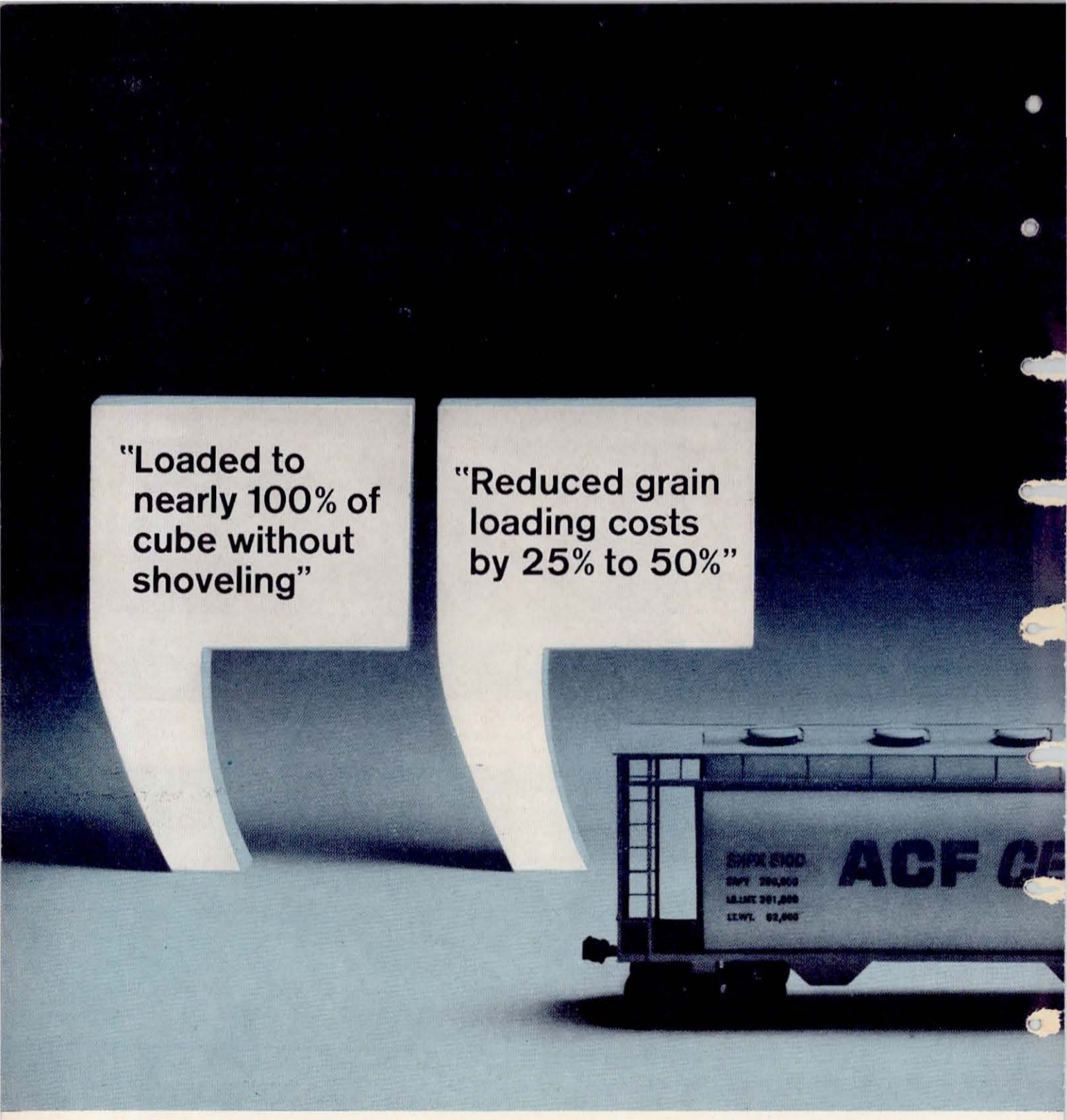
To maintain the service, REA has acquired three Side Loaders (for New York, Chicago and Oakland), 10 C85 container cars, 46 20-foot containers and 12 delivery units (four for New York, two for Chicago, six for Oakland).



HOOKS under container are engaged by spring-loaded bails on Side Loader; container can then be pushed and pulled into position for rail or road hauls.



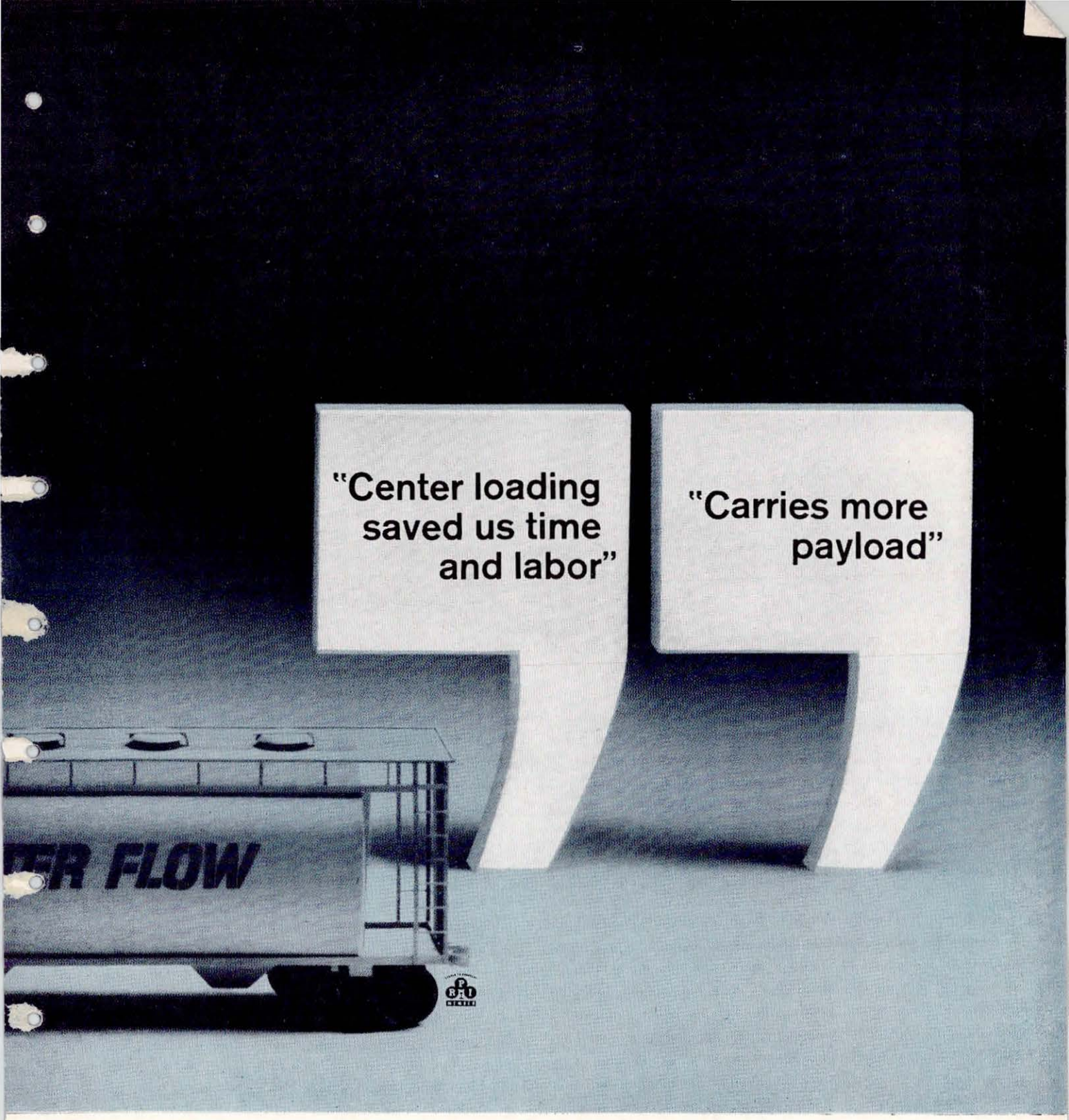
LOCKS on ends of bolsters which are mounted on the C85 car center sill secure container against lateral movement while being handled in trains.



That's what shippers and railroaders are

What's behind the Center Flow's ability to load faster and carry more? Its pear shape design. Field proven with dozens of different ladings, this advanced design makes the difference. It reduces loading time and costs. There are only half the conventional number of hatches—all on the center line to eliminate waste motion of shifting loading spout from side to side.

And you can carry up to four tons more payload in the ACF Center Flow because the car weighs less. In place of the center sill and other heavy bracing required by conventional design, its cylindrical body shell carries a major portion of load stress.



saying about the ACF Center Flow Car

When volume is a consideration, you get an extra dividend with the ACF Center Flow because the car's pear shape conforms to the natural pyramiding of lading. It allows the lading to fill 97% of the interior cube—4% more than conventional cars—without poling or shoveling material into hard-to-fill corners and voids.

Other advantages of the advanced design include: greater versatility for a wide range of commodities, faster unloading and elimination of lading contamination trouble spots. Why not get all the facts? Write: Vice President—Marketing, ACF Industries, Inc., 750 Third Avenue, New York 17, N. Y.

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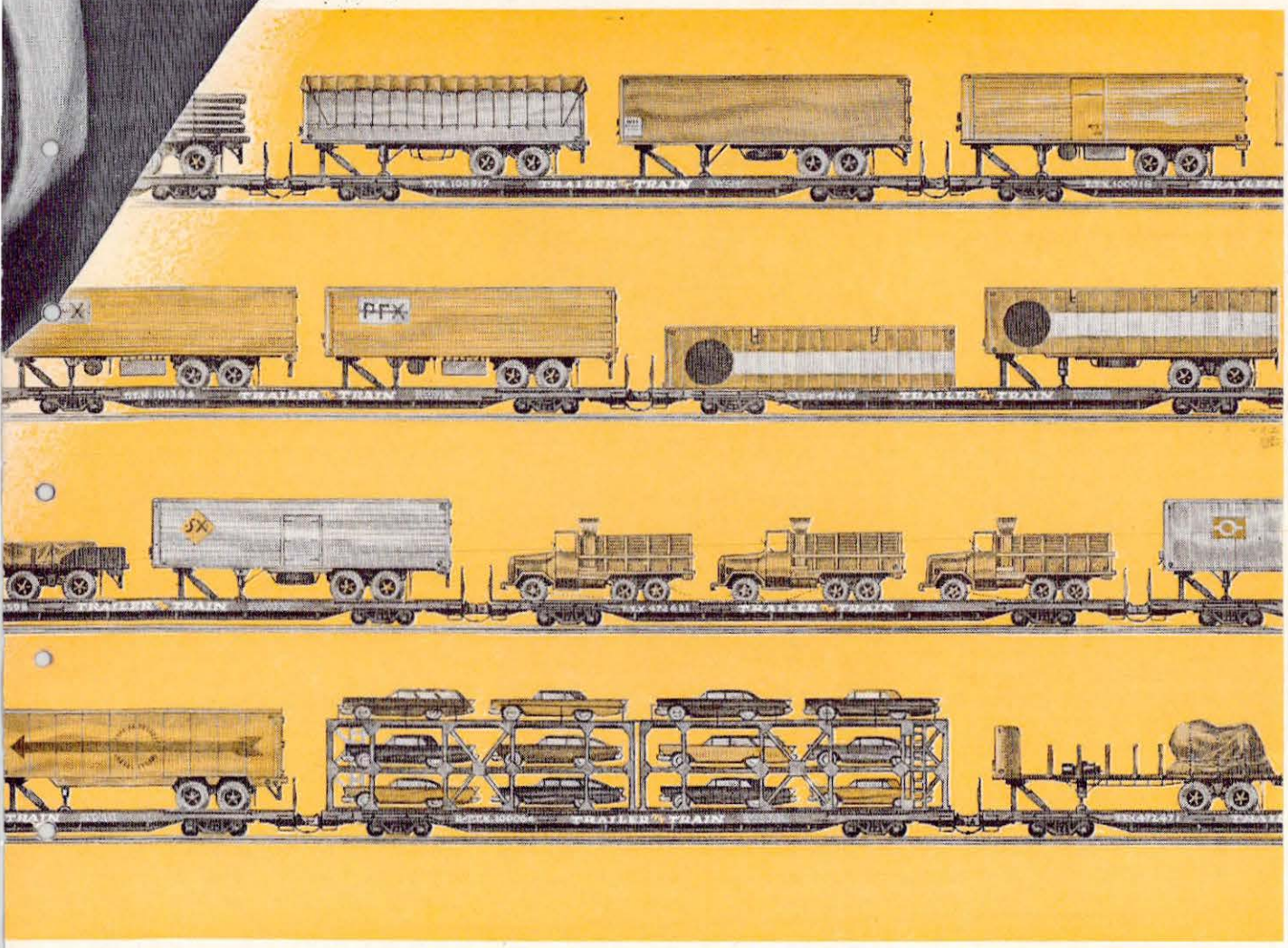

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CAR IDENTIFICATION

Who Will Be First With ACI?

Railroads are looking hard at automatic car identifiers—but a lot of question marks remain.

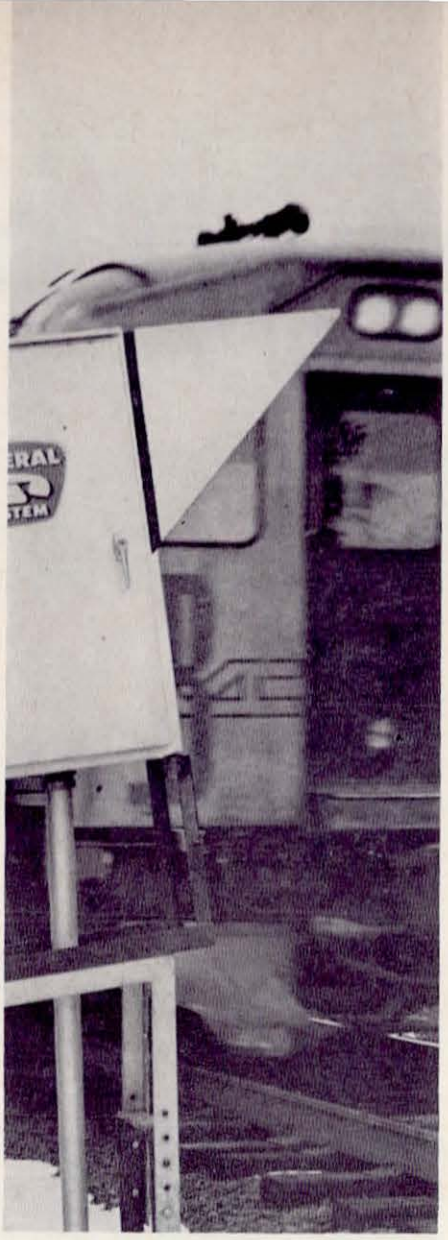
By Robert W. McKnight
Signaling & Communications Editor

Where does automatic railroad car identification stand today? An AAR committee is making an appraisal of various systems proposed, developed or in service on a test basis. Meanwhile, General Electric, Sylvania Electronics, and Union Switch & Signal have ACI systems on test. The Link division of General Precision, Inc., has sold an ACI system to the Chicago Transit Authority for bus identification. Also, several railroads are giving ACI a long, hard look. But, as of this writing, not one railroad has ordered an ACI system.

Briefly stated, an ACI system will identify automatically a car's three initials and six-digit number when the car is moving between 5 and 60 miles per hour. Although some ACI proponents would like to have a system that would identify other characteristics as well—such as light weight, type of car—the complexities of such a system (requiring, as many technical experts believe, an extensive binary coded label) would make the cost of such an identification system economically unfeasible at this time due to the complexity of the system required. However, an ACI system that would provide initial and number identification is considered economically justified.

• **25% return.** The return on the investment for ACI is estimated to be 25%, but railroads are understandably gunshy of spending $20 million to equip freight cars with one system (and spend another $10 million for scanners) only to be confronted with a technically superior system for the same or less money before the first system has paid for itself.

Because of the different technologies or techniques involved in the various



ACI systems, it is doubtful whether any two systems can be made economically compatible (such as black-and-white and color TV sets). Thus, railroads are faced with a difficult choice of selecting one system, or at most two.

"The economics of ACI will not warrant any greater choice than two systems," comments one railroad operating officer, "I wish we could come up with only one system, but I'm afraid that such agreement is just not possible, because of the difficulty of getting so many railroads to agree to buy the same ACI system."

As for the payoff of ACI, the savings most mentioned are in better car utilization and reduction in per diem payments. For example, an ACI scanner at an interchange point would record car initials and number along with date and time the car was placed on the interchange track. Improved accuracy for per diem records and elimination of clerical errors would result from such an ACI installation. Also, ACI installations would provide accurate car location information which is of prime importance to better car utilization.

Other advantages of ACI, often mentioned include:

- Expedited train movements through yards and terminals.
- Assistance in car tracing.
- Improved car maintenance by providing accurate records of car mileage data.
- Accurate data on car identification, which could provide more and better data on car-miles, ton-miles and other important statistical yardsticks for management.
- ACI applied to locomotives could provide accurate mileage data, a key to better control of locomotive maintenance and inspection.
- ACI could provide train identification for commuter operations, expedite trains through interlockings and terminal areas.
- ACI applied to trucks, automobiles, track motor cars and other vehicles could provide better utilization and maintenance.
- ACI applied to trailers and containers could improve their utilization.
- Output of ACI could be fed directly into a computer for instant processing.

In general, ACI economies range from the AAR's estimate (from a survey of representative railroads) of 25% return on the investment to as high as $60 million annually (according to Interchange, a monthly bulletin of the Railway Systems and Management Association). "Whatever the figure, it certainly appears worth the effort of getting off the backside and doing something about it," is how one railroader feels about ACI.

As to costs, the Railroad Action Group (an informal group of railroad research men, RA, Feb. 5, 1962, p. 8) set a figure of $5 per car for labeling and $5,000 for a wayside scanner to read the label and print out a binary code or a Teletype code of the three initials and six-digit number. An AAR committee, headed by W. M. Keller, AAR vice president, research department, has modified these figures by adding $5 to equip a car and similarly added $5,000 for installation of the scanner. Mr. Keller's committee, which is to appraise various ACI systems and recommend one or two to the railroads, sets the costs of ACI as follows: Maximum cost to label a car is $10, and maximum cost of wayside scanner is $10,000. Some of the manufacturers who made proposals to the RAG committee still maintain that they will be able to meet or beat the $5 figure for the car labels and their installation.

Using an estimate of 2,000,000 freight cars, the maximum cost to equip cars for ACI would be $20 million;

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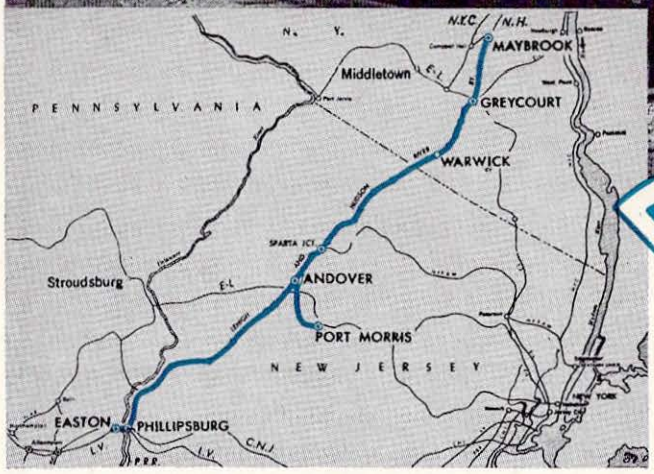

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assuming 1,000 wayside scanners would be required for America's railroads (said to be a conservative assumption, as more may be needed), the cost for these scanners would be $10 million, thus running the total cost of ACI to $30 million.

The disadvantages of ACI are few, but ACI has opponents as well as proponents. Disadvantages include:

- ACI would not make an appreciable reduction in the number of yard clerks required.
- Communications facilities and expenses would increase.
- ACI would not make any appreciable saving in paper work or car records.
- ACI is not economically justified on a small railroad.

Estimates have been made that if 75% or more of the railroads equip their cars, then it would be economically justified for them to equip all freight cars. "I'm sure that even those roads who would not consider installing scanners, could afford to label their cars," one superintendent commented. He continued: "I believe that ACI would pay for itself on our road if all we did was to label our cars. The prompt, accurate identification of our cars when off-line would benefit us through better utilization."

Will ACI get off dead center? That's a good question. Basically, the problem is one of agreement by railroads on a specific system. No doubt there is agreement that ACI would be beneficial to the railroad industry, but the cost—$30 million for labels and scanners—coupled with a rapidly advancing technology and a multitude of systems to choose from, makes the selection a difficult one.

However, railroads must face up to the problem, and according to one spokesman, a comparison with weaponry is very much to the point. To wit, the military has to decide at what point designs will be frozen and weapons put into mass production, because blueprints don't shoot.

It would seem logical that the AAR committee could come up with a decision this year on the system to be used for ACI. That 25% minimum saving is going down the drain every year that passes without automatic car identification.

Automatic Car Identifiers—Who Makes What

The following descriptions are presented as information.

American Brake Shoe Co.: Has sales rights in an ACI system developed by Dr. Lan Chu of MIT in which light is directed to a tag on the freight car. It is an optical system based upon the geometry of the tag. Output of the system can be in a Teletype format or for transmission to a computer center for data processing.

ABS also has manufacturing and sales rights to a system developed by Transdata, Inc. (RA, Feb. 5, 1962, p.8). This system uses microwave energy directed at a reflector tag mounted on the freight car. The wayside scanner and electronic gear translates the microwave reflections from the car tag into teletypewriter code for local printout or transmission.

Frederic J. Corporon: Has a patent for an ACI system in which a notched steel bar is mounted on the bottom of the truck frame. A series of notches produce the car's initial and numbers in digital code form. The bar passes the coded information by magnetic induction to a detector positioned on the road bed. An appreciable distance may exist between bar and the detector. The bar is magnetized just before read out, and demagnetized directly after.

Devenco, Inc.: Proposed ACI system would use an adhesive reflective tag mounted under the journal box of the freight car. The trackside scanner would consist of an optical reader and associated electronic equipment. The light source would be an incandescent lamp which will illuminate the Scotchlite tag. The coded number, in binary decimal code, will be transmitted concurrently with the passage of the train. Output, with appropriate buffer storage, can be to Teletype equipment or directly into a digital computer.

Electronic Associates Ltd: ACI system which has been tested has a card or bar of radiation-absorbing material containing a desired pattern attached to the freight car or locomotive. The absorbing material is of metal. A source of radiation and a detector are placed at the wayside and when the car passes, it produces a pattern of radiation on the detector characteristic of the information on the car. The radiation is highly directed and only present when the vehicle is in the detecting area so that no hazard is provided to anyone on the car or in its vicinity.

Another ACI system has small buttons of radioactive material arranged in a pattern on a plate mounted on the bottom of the car. The pickup unit located between the tracks senses the pattern of gamma radiation emanating from the car and produces a signal for each pattern.

Erie-Pacific: Proposal for an ACI system is a focused induction field reflective system which consists of two basic parts: (1) a car unit consisting of 42 pairs of printed-circuit inductive loops in a thin, flat (2 by 11 foot) container, mounted one to a car on the underside, and (2) a scanner unit buried beneath the center of the track and consisting of two inductive field-sensing devices, a 44-bit shift register, various control, logic and checking circuits, an output coder-transmitter and a power supply.

Feedback Controls, Inc.: System proposed to the Railroad Action Group is based on photoelectric reading of an optical matrix. A car's initial and number will be represented by binary coding on the matrix, which will comprise a flat plate divided horizontally into halves. One half will have a row of slots punched out. The other half serves as a reference in order to enable the system to operate properly with dirty identification plates. The matrix will be mounted on a car's side frame above the springs.

The matrix plate will be illuminated by a light source and reflector. The reflected light from the two halves will be observed alternately by a receiving photoelement. The output of this wayside equipment is to be a binary signal capable of operating a tape punch or other numerical data-utilizing devices.

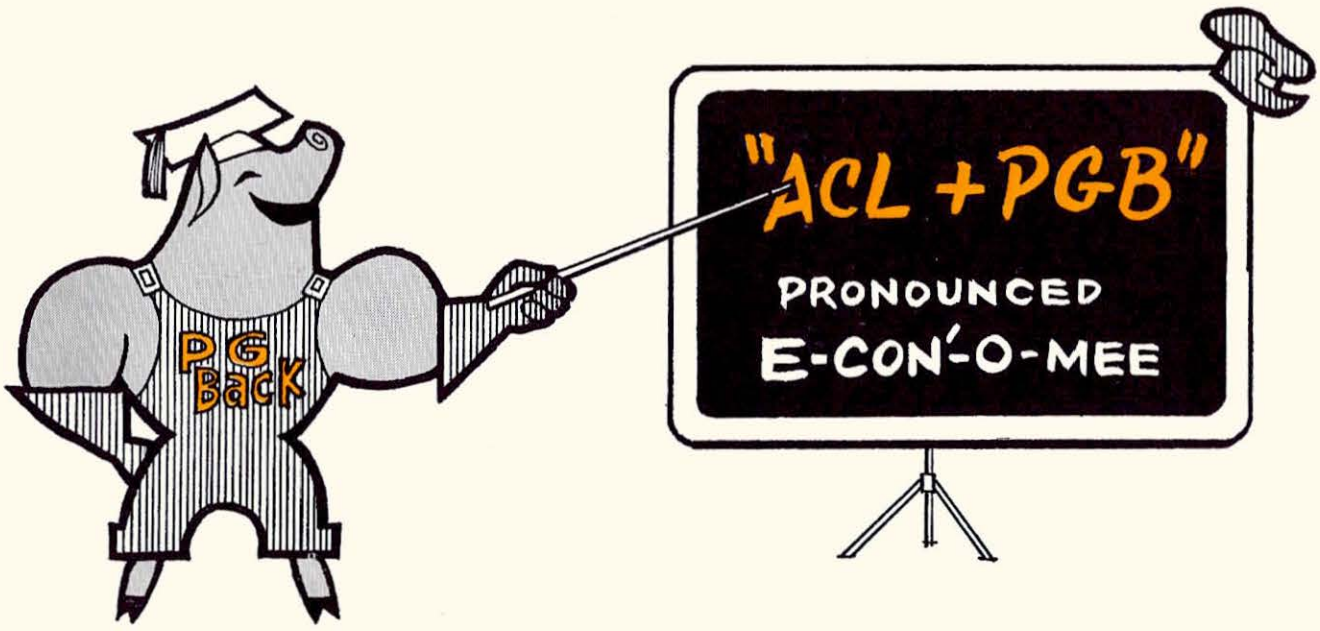
General Electric: Has tested an ACI system in which a coded number, using Scotchlite stripes, is placed on the car and read photo-electrically. The output is a 5-channel punched paper tape.

Another system developed by GE uses radio waves in the range from 280 kc to 650 kc to transmit the information. A designator, which represents the car initial and number, is coded in binary code and mounted on the car. At the wayside a transmitter antenna radiates energy to the passing designator (essentially a car-carried coil) which affects the coupling between the transmitting antenna and an adjacent receiving antenna. The result of this action is a signal that identifies the particular car.

In a third ACI system, the car carries a 27 mc radio transmitter modulated by coded pulses from a delay line. This signal is then received at the wayside and decoded. No power supplies are required on the car. An oscillator at the wayside generates 2,000 cycles per

(Continued on page 50)

P. G. BACK: PROFESSOR OF SPELLING



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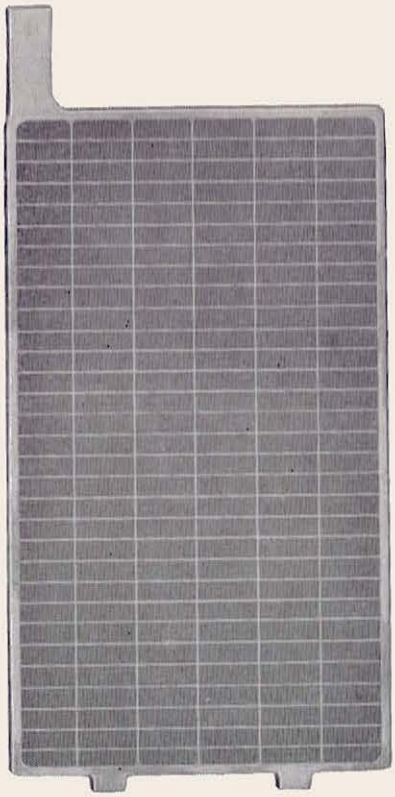

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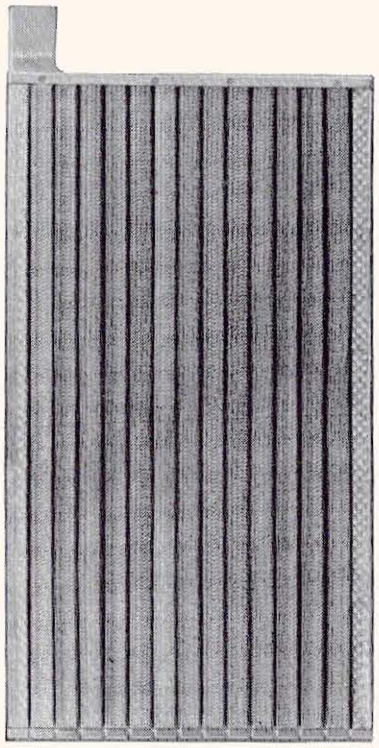

of its unique construction. Notice, especially, the square tubes which make up the positive plate. Originally, Exide-Ironclad positive plates were made of round tubes. The new square shape increases both total surface area and volume of positive active material. Hence you get greater capacity in the battery without increase in size.

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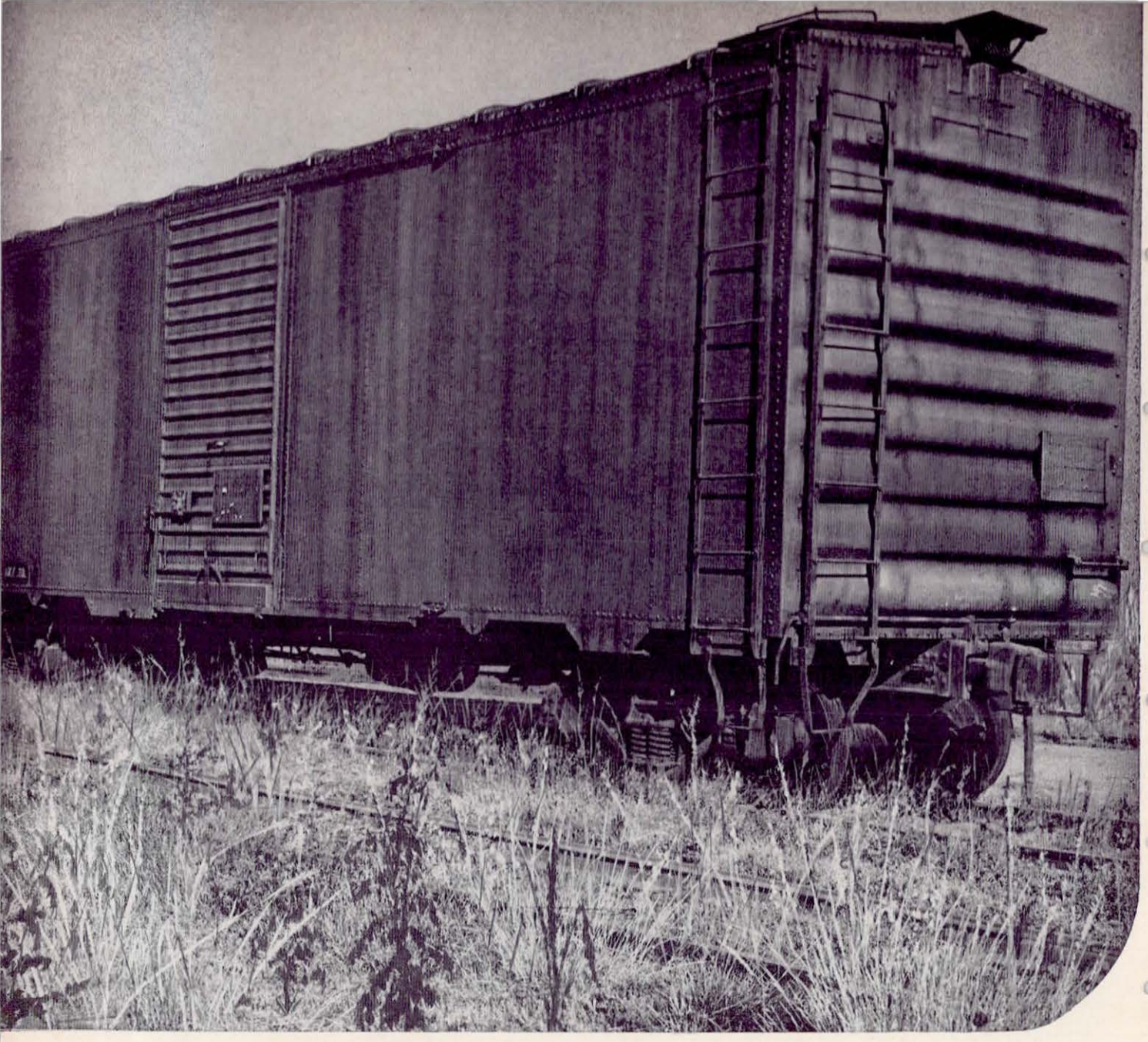

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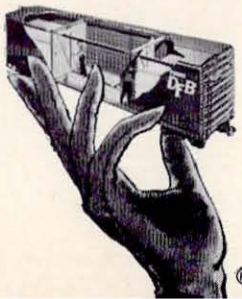

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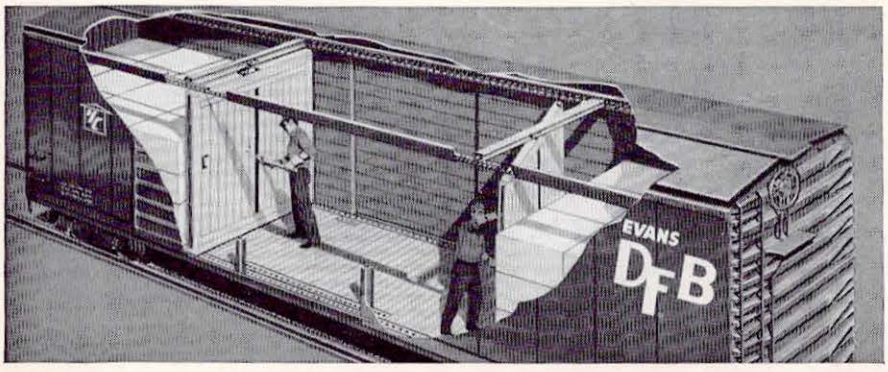

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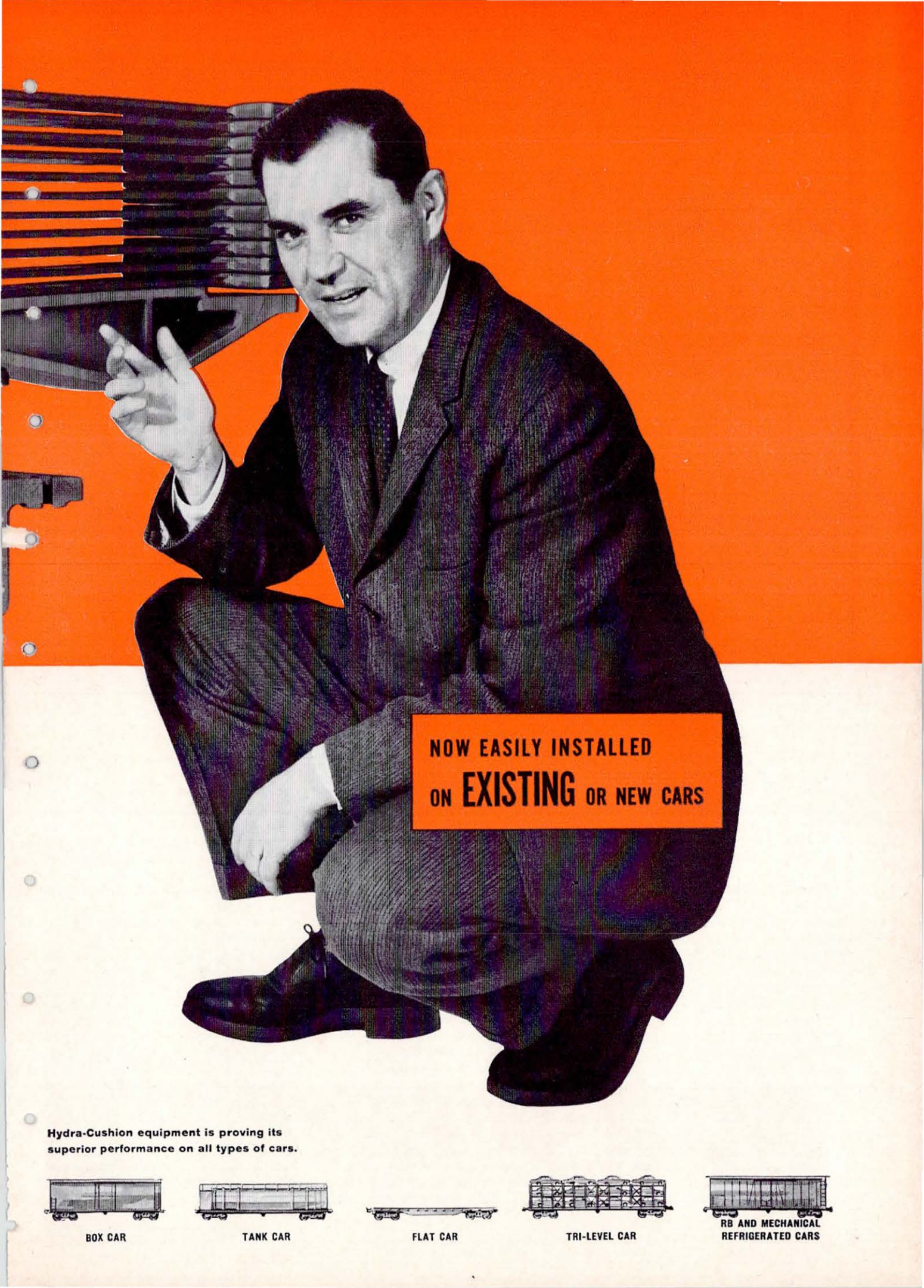

Hydra-Cushion equipment is proving its superior performance on all types of cars.

BOX CAR

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FLAT CAR

TRI-LEVEL CAR

RB AND MECHANICAL REFRIGERATED CARS

Automatic Car Identifiers

(Continued from page 42)

second, feeds it to a coil, which by inductive coupling actuates a 2,000 cps coil on the car which powers the delay line and the radio transmitter.

All three systems will provide output codes that will operate paper tape punches, teletypewriters or feed data processing equipment.

General Railway Signal Co.: Is doing research and development work on several approaches to this problem.

Hallicrafters: Proposes an automatic car identification system using a C. W. radar-microwave system. The microwave energy is focused by a focusing antenna which provides a far-field-like pattern at near field distances. This focused microwave energy is beamed on a coded reflective card attached to the car body. The card consists of conductive reflective strips placed on an RF (radio frequency) absorbent backing material. The width of the strips is such that only one strip at a time is effectively illuminated by the main lobe of the focused beam. Strips reflect the incident energy directly back to the focused antenna and a pulse is received. In the absence of a strip, no pulse is received. The strips are placed in a binary decimal coded arrangement. The pulses upon receipt are detected and decoded in electronic equipment. The car number can be printed out in any conventional fashion, such as on paper tape. The freight car can be from three to four feet from the focused antenna.

The patent for this system has been applied for. The main designers are Dr. C. M. Knop and M. Ross.

Hoffman Electronics Corp.: The following description is of an ACI system proposed to the Railroad Action Group, headed by J. J. Schmidt, assistant director of research, Denver & Rio Grande Western. The basic method is patterned after one developed by Worth G. Read of the Great Northern.

As freight cars pass over a marking station (at perhaps 10 miles an hour), paint jets under the control of a keyset operator (or under the control of an automatic controller receiving instructions from a data processing computer) mark the four axles of the car with bands of white and black paint that are coded in binary form for the numbers and letters identifying the car. The car may be identified automatically by direct reading of the bands from the axles in a suitable optical reader that uses photo-sensitive detectors. The output signal is reduced to a hard copy, for example, Teletype output, or is fed in electrical form into central data processing equipment.

Contrast detecting circuitry would allow automatic re-spraying of information which might be fading out because of dust or dirt, before it actually started causing errors. The primary advantage of the system is cost, which would be about five cents per car.

Wallace O. Leonard, Inc.: In a proposal to the Railroad Action Group, an ACI system was described using a metal tag containing holes of different sizes. The tag is mounted under the car body. The tag will interrupt a beam from a transmitter mounted at the wayside. In line with the beam on the opposite side of the track would be a passive reflector or a receiver unit. The beam may be either light, very short radio frequency waves (microwave) or an ultrasonic beam. The tag is binary coded. Output would be for teletypewriter or data processing equipment.

Link Division, General Precision, Inc.: System that was bought by the Chicago Transit Authority is the same as one that can be used on the railroads (RA, April 13, 1959, p. 13). The ACI system consists of passive electronic circuit blocks which would be attached to freight cars. A coil is buried under the track at the location where ACI is to be obtained, and this coil is connected to an interrogator unit. Passage of the car with a response block over the coil, disturbs the coil's magnetic field, producing an identifying signal.

Mergenthaler Linotype Co.: System proposed to the Railroad Action Group is to code cars by means of special geometric surfaces attached to the outside of each car. These surfaces will receive signals radiated in the supersonic region from a transmitter as they pass the scanning station. These signals will be reflected by the surfaces to receivers where they will be processed for transmission to a distant printer or computing center.

Mohawk Designers, Inc.: Proposal to the Railroad Action Group is a magnetic system in which small (½ by ½ inch) permanent magnets would be attached to the underside of each freight car. The arrangement could be set up to represent the three letters and six digits of the car identification or could be arranged in binary code form. In either case, a set of pickup coils located between the rails reads these magnets as they pass over—in much the same manner as an electric generator armature coil reads the magnetic field set up by the stator. The electrical currents thus generated in the pickup coils are amplified and processed through the necessary electronic circuitry to produce a standard Teletype signal for transmission to a printer where a permanent record of the car numbers is produced.

Motorola Communications & Electronics Inc.: In a proposal to the RAG committee it was suggested that an optical system employing a transmission mask technique would be most satisfactory. This system would use a light beam directed across the rails. Somewhere in the clear area under or between the cars a transmission mask (plate with holes in it) would be mounted so that the train's motion would cause it to interrupt the beam. The holes and lack of holes could produce on-off signals suitable for a binary coded address.

Sylvania Electronic Systems: ACI system has been on test on the Boston & Maine for over two years with wayside scanner and readout equipment at Woburn, Mass. (RA, Mar. 25, 1963, p. 40). Light from a source in the wayside unit is directed via mirrors on a rotating wheel to a Scotchlite retroreflective label on the freight car. Initials and numbers are represented by pairs of colored stripes. The label is scanned from bottom to top, and the wayside electronic circuitry provides printout on a paper tape or a Teletype code for cars moving between 0 and 60 mph or more.

Union Switch & Signal, division of WABCO: In a system proposed to the RAG committee and on test (RA, Feb. 5, 1962, p. 8), an infrared light source is mounted on a pedestal at the wayside so as to illuminate a reflector plate mounted on the car body. The car identification plate which measures 22 by 6 inches consists of vertical stripes of reflex-reflecting material separated by non-reflecting surfaces. The stripes are so arranged with the non-reflecting surfaces as to produce the car identification symbols in teletypewriter code.

A lens system, mounted concentrically with the wayside light source, receives the reflected infrared light from the reflector plate on the car. This lens system projects an image of the car body plate through narrow slits onto an array of photoelectric cells. Photocells detect the code which is fed to electronic equipment for storing until printing out on a Teletype machine or transmitted to a distant data processing location.

WORLD'S LARGEST MAKER OF HARDWOOD FLOORING ANNOUNCES:

A new freight car flooring that installs faster, lasts longer

(and handles fork loads to 60,000 lbs.)

New laminated edge-grain Dura-Wood is rapidly replacing ordinary flat-grain vehicle grade pine, fir and oak floors in freight cars . . . for reasons that make sense in maintenance and service.

Dura-Wood requires less time, less labor, fewer bolts to install. Boards are pre-cut to exact length. No on-site matching, fitting, joining. No waste lumber.

Dura-Wood has been certified "twice as uniform in strength" by the Wood Technology Laboratory, University of Michigan (analysis summary on request). It is guaranteed to handle fork lift axle loads up to 60,000 lbs., according to thickness.

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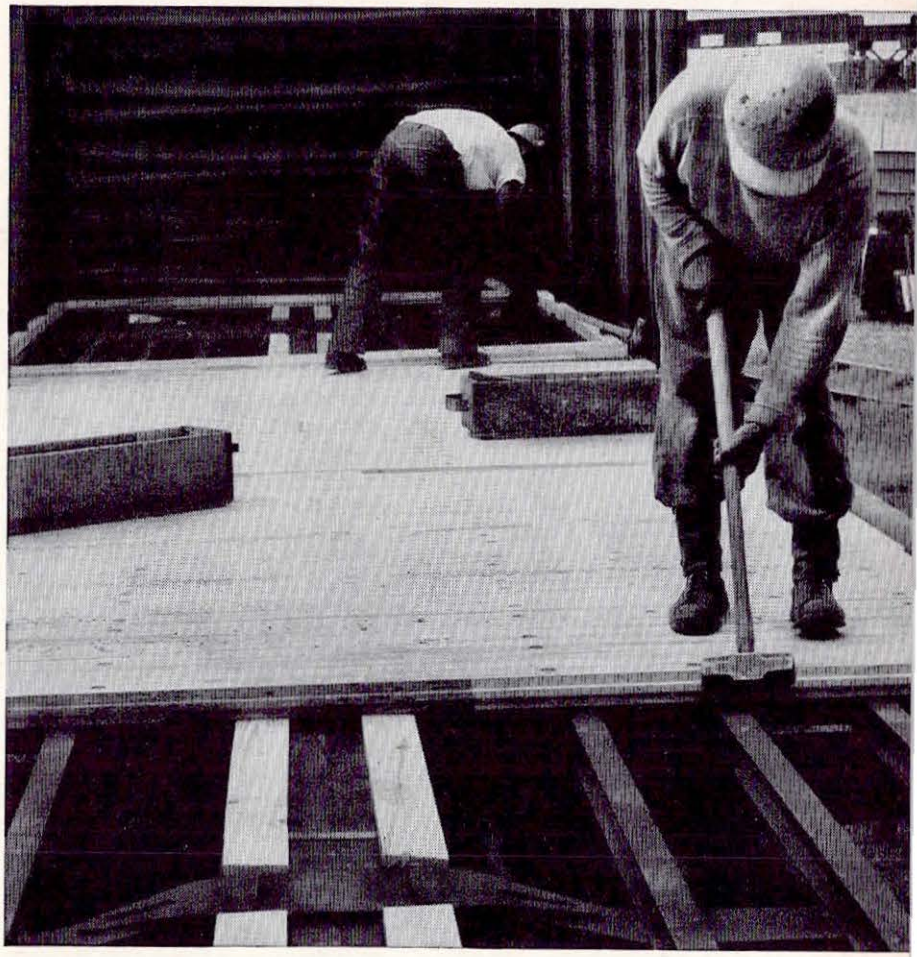

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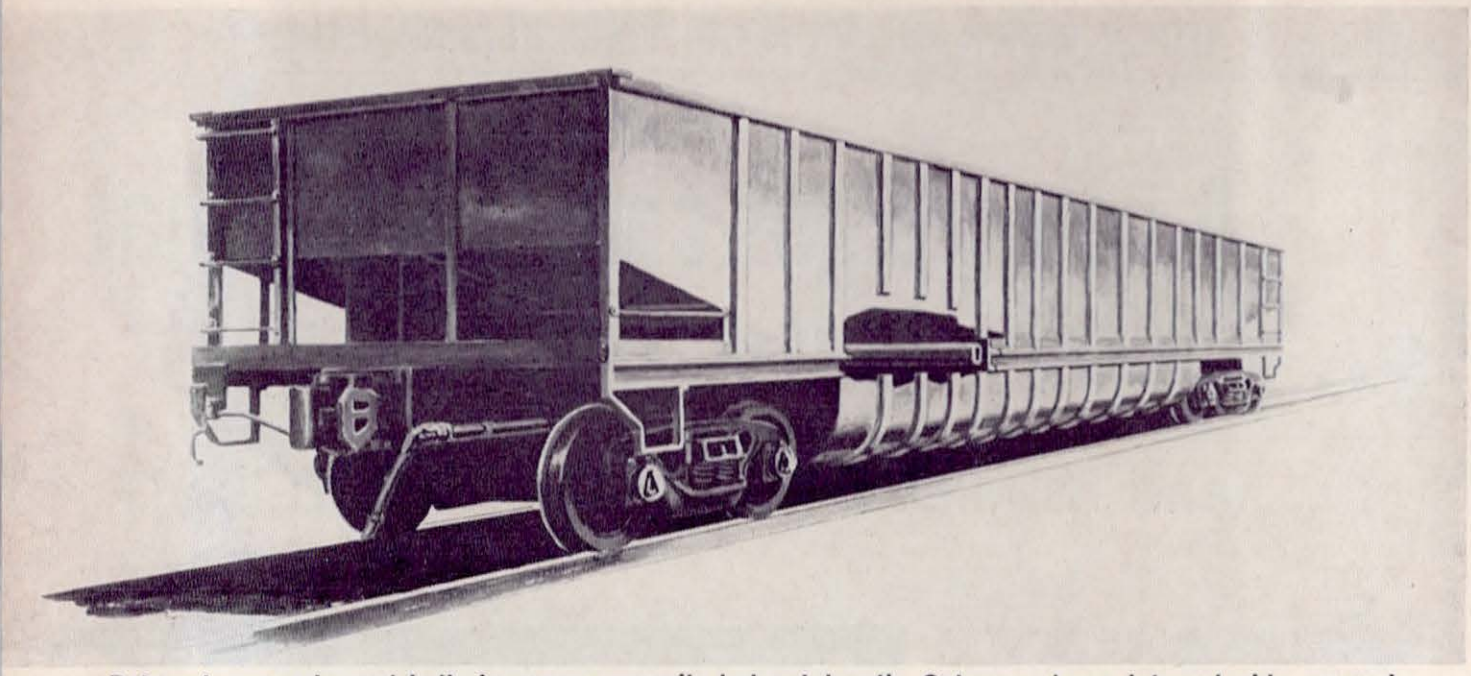


Rotary-dump car's coal belly increases capacity but not length. Cutaway shows internal side support.

ACF Designs Two 100-Ton

"Potential cost economies with an integral train utilizing advanced equipment are truly impressive," ACF's F. H. Boland says in announcing two new cars designed for such service.

Moving coal to market in the United States is the world's biggest transportation job. To help the railroads keep this traffic, the American Car and Foundry Division of ACF Industries, Inc., has announced two new 100-ton integral-train coal cars. "The cars are designed to enable the railroads to take full advantage of the significant economies possible in the integral-train transportation of coal," said Francis H. Boland, ACF vice president and general manager of the American Car and Foundry division.

● **'Comprehensive study.'** In making the announcement Mr. Boland said, "Our decision to design two coal car models rather than one is based on the findings of a one-year comprehensive study by ACF of the nation's present and future coal transportation requirements. One model is planned to utilize rotary dump installations to their maximum capabilities. The other, a rapid-dump, bottom-unloading car, is intended for the large-scale, bottom-unloading facilities envisioned for the not-too-distant future."

The rotary dump model is 45 feet long and 12½ feet high from rail to top chord. Adequate provision is made for drainage of wet coal en route from the mine and for protection of air lines and other under-car equipment from coal-thawing heaters. A smooth, unobstructed interior has been planned to insure rapid and complete unloading.

The rapid-dump, bottom-unloading model is an open-top version of the all welded, stub-center-sill ACF Center Flow materials handling car. It is 52 feet, 2 inches long over the strikers and 13 feet high from rail to top chord. The outlet doors, which make up the entire floor of the car, are designed to unload 100 tons of coal in less than 20 seconds without unloading aids of any kind. Operating pressure for the doors is provided by an electro-hydraulic pump. The unit is self-contained and utilizes a 15-horsepower electric motor, with control mounted at one end of the car, to drive a dual hydraulic pump system under all operating conditions.

● **Innovations on the way.** Commenting on rails' future in coal traffic, Mr. Boland said, "We believe there will be more innovation in the transportation of coal in the next five to ten years than there has been in the last 50. In fact, important changes already have taken place, for example, in the growing popularity of the concept of integral-train operation.

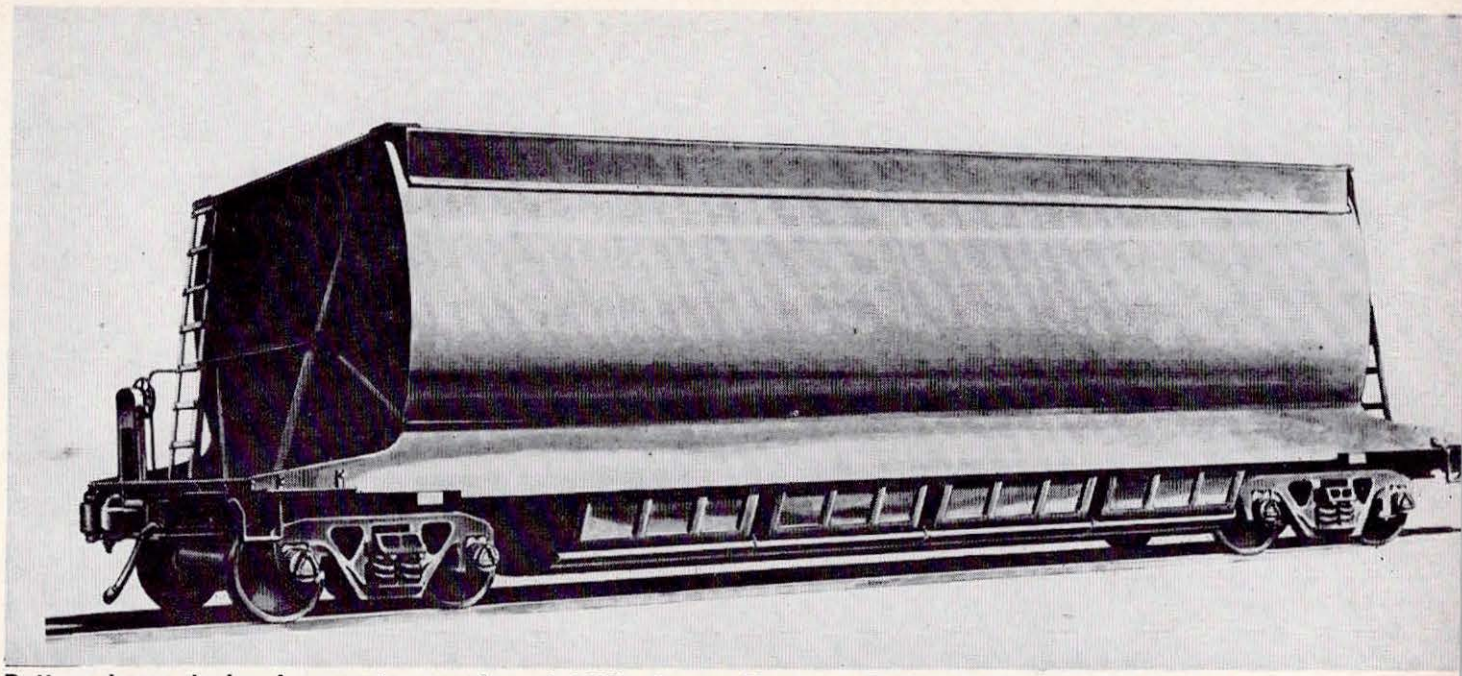
"Potential cost economies with an integral train utilizing advanced equipment are truly impressive. It is possible to think of running an integral train of 270 cars over a 500-mile haul with a 50 to 75% cost reduction.

"By passing these savings along to the shipper in the form of substantial rate reductions, it becomes apparent that coal can be carried economically for the first time to Pacific Coast regions for electrical utility consumption. It might also be possible at this level to recapture a number of dwindling markets such as the New England States."

The ACF study indicated that while the total consumption of coal in the United States has declined steadily over the past 15 years, the amount used by the electric utility industry has increased tremendously, and can be expected to continue to do so. This is especially true of the Pacific Coast region that up to now has not consumed any coal for power.

An abstract of the study follows:

● **Changing pattern.** Since World War II there have been radical changes in coal consumer markets. The railroads' switch to diesels, the expansion of natural gas pipelines and increased imports of residual fuel oil resulted in



Bottom-dump design is open-top version of ACF's Center Flow car. Outlet doors comprise entire floor.

Integral-Train Coal Cars

the loss of several traditional markets.

As these markets faded, the electric utility industry spectacularly increased its consumption of coal. The amount of coal purchased by electric power utilities doubled between 1937 and 1947 and again between 1947 and 1959. It is predicted that utility coal consumption will grow to 475 million tons in 1975; or just about triple the 166 million tons consumed in the United States in 1959.

● **New competitors.** The steady increase in railroad freight rates combined with the tremendously increasing coal requirements of the electric utility industry have resulted in the emergence of two coal transportation competitors far more dangerous to the railroads than the water and highway conveyors ever were. These competitors are the coal slurry pipeline and electric power transmission lines.

After discussing federal plans for support of these two competitors the survey covered present transportation and unloading procedures used in major coal consumption markets. At every unloading operation inspected where more than 30 cars had to be dumped daily the rotary car dumper was employed.

TVA's most ambitious project to date, the Bull Run plant, is now in the final planning stages. Bull Run is being designed to receive an initial turbogenerator of unprecedented size—900,000 kw; however, a second 900,000 kw turbogenerator has already been ordered and the station is being designed for an ultimate of four units of equal or larger capacity. This represents a coal requirement of at least 8.5 million tons per year, delivered to one generating plant.

TVA coordinated the design of its coal handling system at the Bull Run plant with the L&N design of the rapid bottom dump prototype coal car that will be used to serve the plant. This car will be used in fast turnaround service from the mine at Corbin, Ky., to the Bull Run plant near Knoxville, Tenn., 80 miles away.

A train of 72, rapid bottom dump, 100-ton coal cars will make the circuit trip from the mine to the plant and back again in 24 hours. The cars will be unloaded in 45 to 60 minutes.

In 1959, Southern Electric Generating Company, an affiliate of the Southern Co., the South's largest electric utility, considered building a plant over a coal mine in Alabama and transmitting power by transmission line. The Southern Railway, through a combination of improved coal cars and increased operating efficiency, was able to offer rates low enough to keep the coal on the rails. The Southern has said that the economies available from this combined approach will permit rates that equal the costs of a 30-inch pipeline.

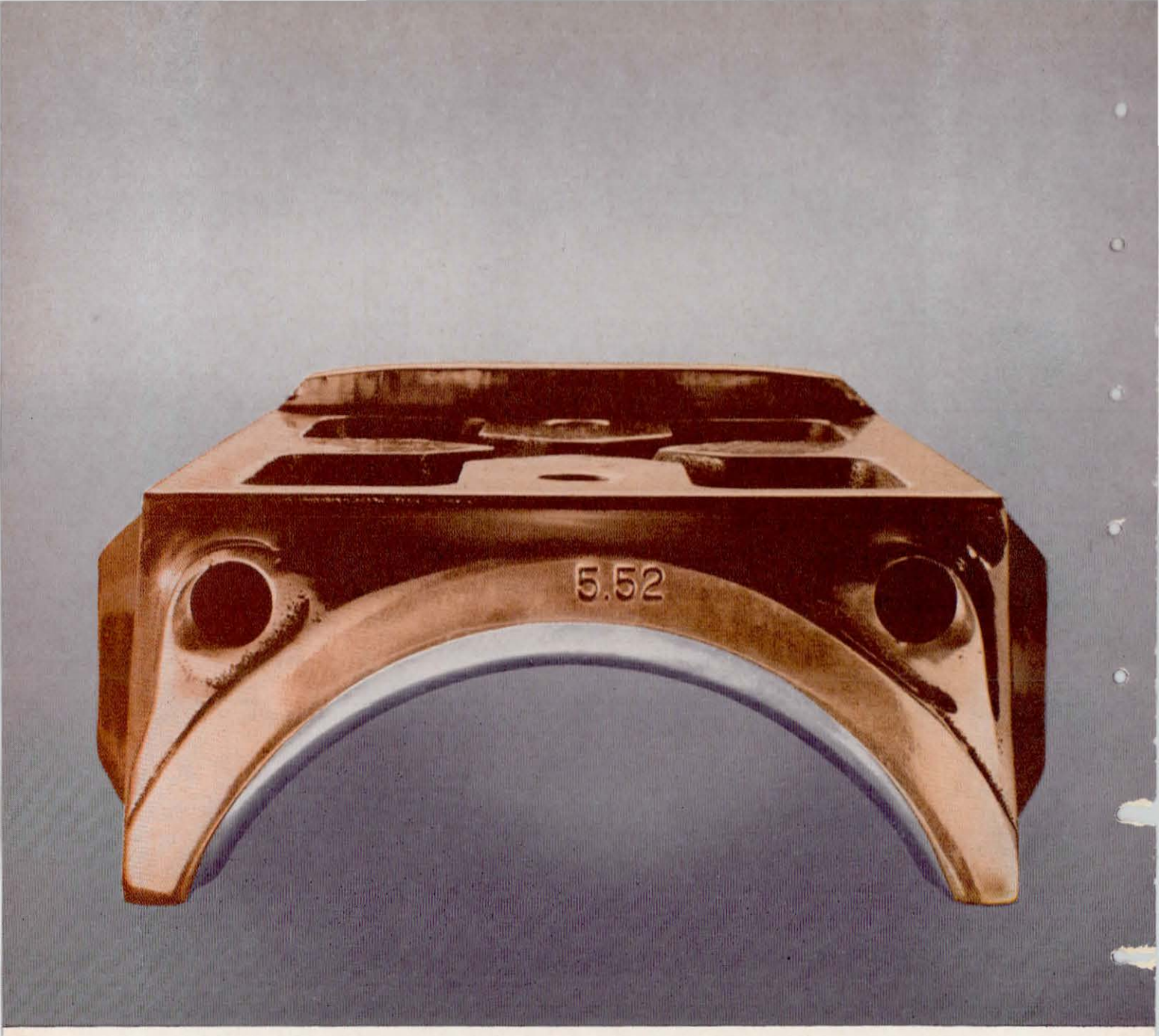
The SEGGO plant at Wilsonville, Ala., is serviced by two trains of 87 cars each. The cars are 100-ton, aluminum gondolas, specifically designed for rotary dump operations.

Five days a week, a 65-car train leaves the mine at Parrish, Ala., with a 7,280-ton load, stopping at New Maylene, Ala., 40 miles from Wilsonville, to pick up 22 cars for a total tonnage of 9,744 tons. The train makes the 106-mile run to Wilsonville in a little over four hours and returns the next day as a second train makes the loaded run.

The Southern maintains that each of these cars, which cost $21,000, brings in about $18,000 revenue annually. Each car accounts for 6,490 ton-miles per day or over seven times the national average.

● **Systems approach.** It is becoming increasingly clear, both to the carriers and to the shippers, that significant and effective improvements in coal transportation that result in economies to the shipper can only be obtained by approaching the problem from the physical distribution, or systems viewpoint.

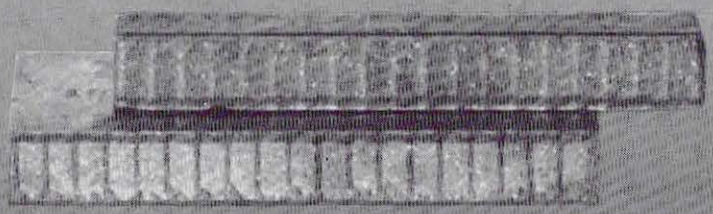
Transportation studies, sponsored by the major coal-carrying railroads in an attempt to combat the advance of the coal slurry pipeline, have developed the "integral train" or "unitrain" concept. Essentially, the "unitrain" concept is the systems approach to coal transportation carried to the ultimate in efficiency and economy of operation.



What difference does it make if

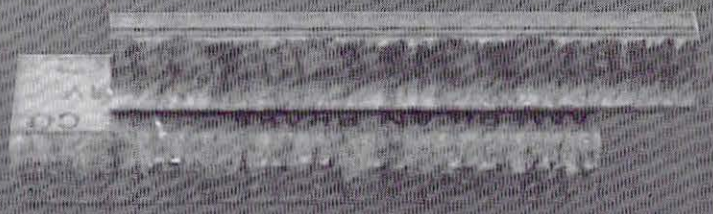
BABBITT BOND TEST SPECIMENS

hand-poured



rupture at 5,000 psi

Linamatic*-poured



rupture at 12,480 psi

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Absco flatbacks in sealed box service have made the use of roller bearings an unjustifiable luxury.

For those concerned with lower bearing costs and improved railroad profitability, the Absco flatback (estimated life up to 8 years) is by far the most economical bearing for freight service. For more information, see your Brake Shoe representative. Or write: Railroad Products Division, 530 Fifth Avenue, New York 36, N. Y.

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Cars made with Reynolds Aluminum . . .

. . . carry coal with 40% more payload

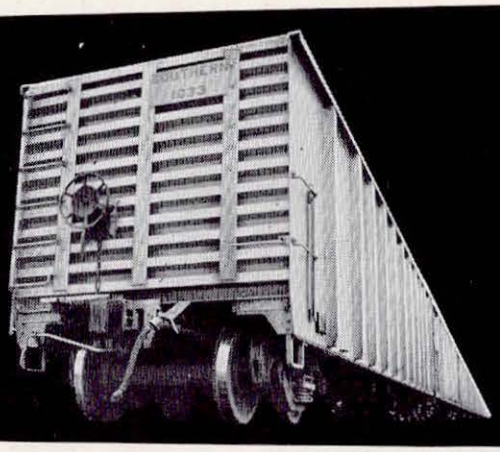
. . . . . carry chemicals that steel can't handle economically

. . . carry corn at lower costs

Why Aluminum Cars?

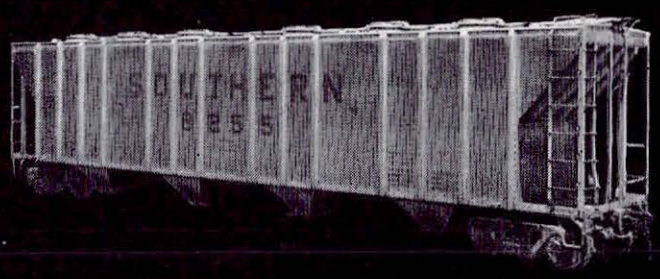
1. Aluminum cars are lighter, easier to handle, and offer bigger payload capacities.
2. Aluminum cars need little or no maintenance, will never rust.
3. Aluminum cars haul corrosive cargos that can't be hauled economically in steel cars; they reduce cargo contamination, increase cargo protection.
4. Aluminum cars offer no special fabrication problems.

Southern Railway's gondolas made with Reynolds Aluminum haul 100 to 110 tons of coal each . . . as compared to the conventional steel car's 70 ton capacity. And because they're aluminum, these gondolas resist abrasion, are clean dumping, need no protective maintenance.



GATX tank cars made with Reynolds Aluminum are the practical solution to hauling highly corrosive ammonium nitrate fertilizer for Armour & Co. Aluminum is immune to this corrosion. Steel tank cars need expensive protective coatings, and stainless steel cars cost more than aluminum. Aluminum also protects chemical cargos with its high reflectivity, high thermal conductivity, and non-sparking properties.

Southern's "Big John" hopper cars made with Reynolds Aluminum haul 100 tons (and more) of corn each. This is twice the capacity of a conventional steel car . . . and enables Southern to offer greatly reduced freight rates for hauling grain. The resulting savings will be of ultimate benefit to everybody concerned.



Versatile aluminum is also used in car doors, flooring, roofs, inner-liners, containers, bulkheads, and crossmembers—to cut deadweight and maintenance costs, and increase payload capacity.

For any railroad application, Reynolds offers design and technical assistance . . . plus the highest quality aluminum. Get information from your local Reynolds office, or write direct to *Reynolds Metals Company, P. O. Box 2346-TM, Richmond 18, Virginia.*

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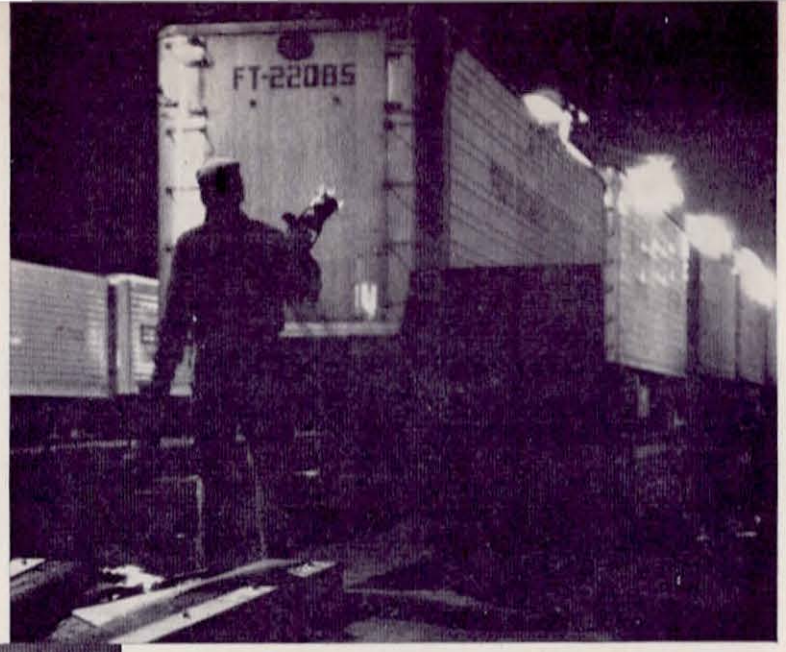

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Here comes the straddle crane. Rolling on giant's legs. Straddling train and tractor. Got the trailer? Lift it off, hook it up, take it out of here!

It's dawn. Trailers are off. Now for the autos! Chevies for Trenton. Fords for Hartford and New Rochelle. Unchain 'em. Let 'em loose. Bridge plates down? OK! Drive 'em off.

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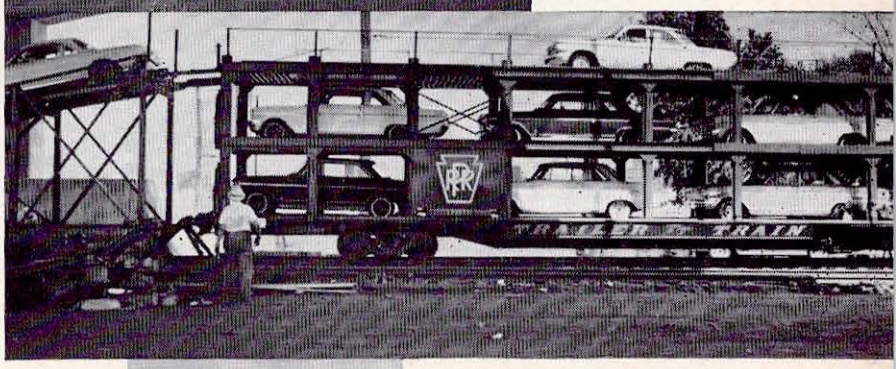

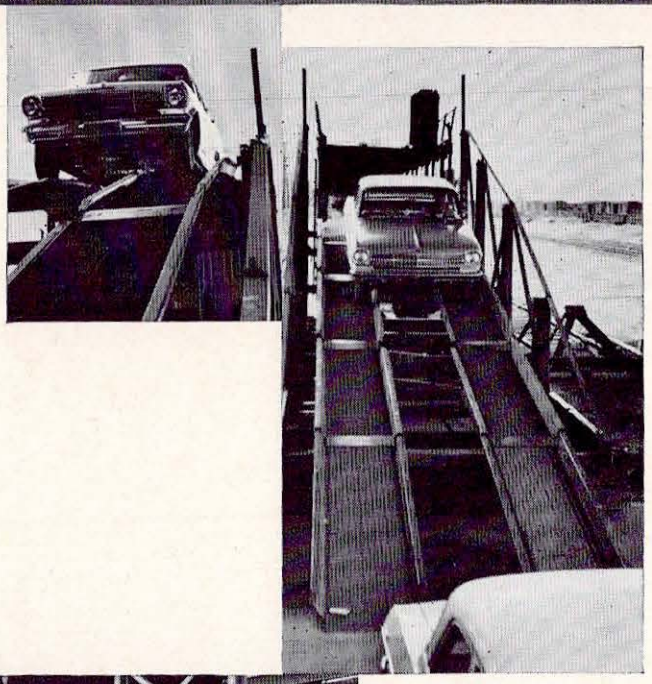

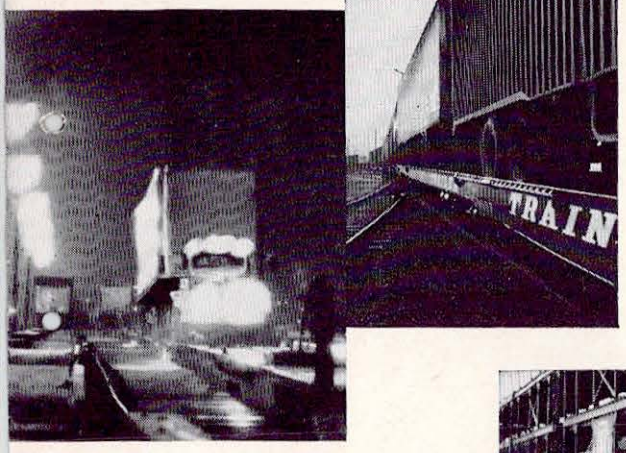

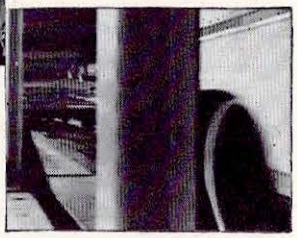

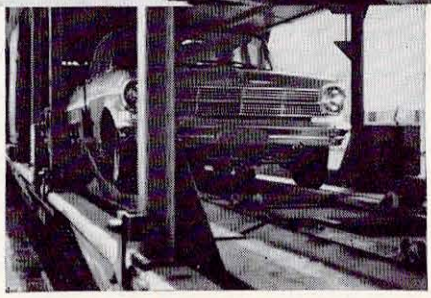

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Distribution can be complicated, costly and profit killing. But REA Express can simplify it, lower the cost and give you more gross profit dollars.

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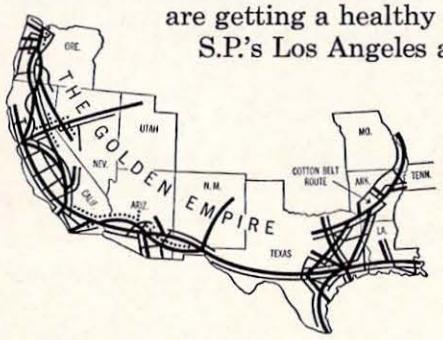
New time-saving equipment like this reflects S.P.'s continuing efforts to develop efficient new services for shippers. If you'd like to know more about S.P.'s fast-growing piggyback services, just call your nearby S.P. representative.



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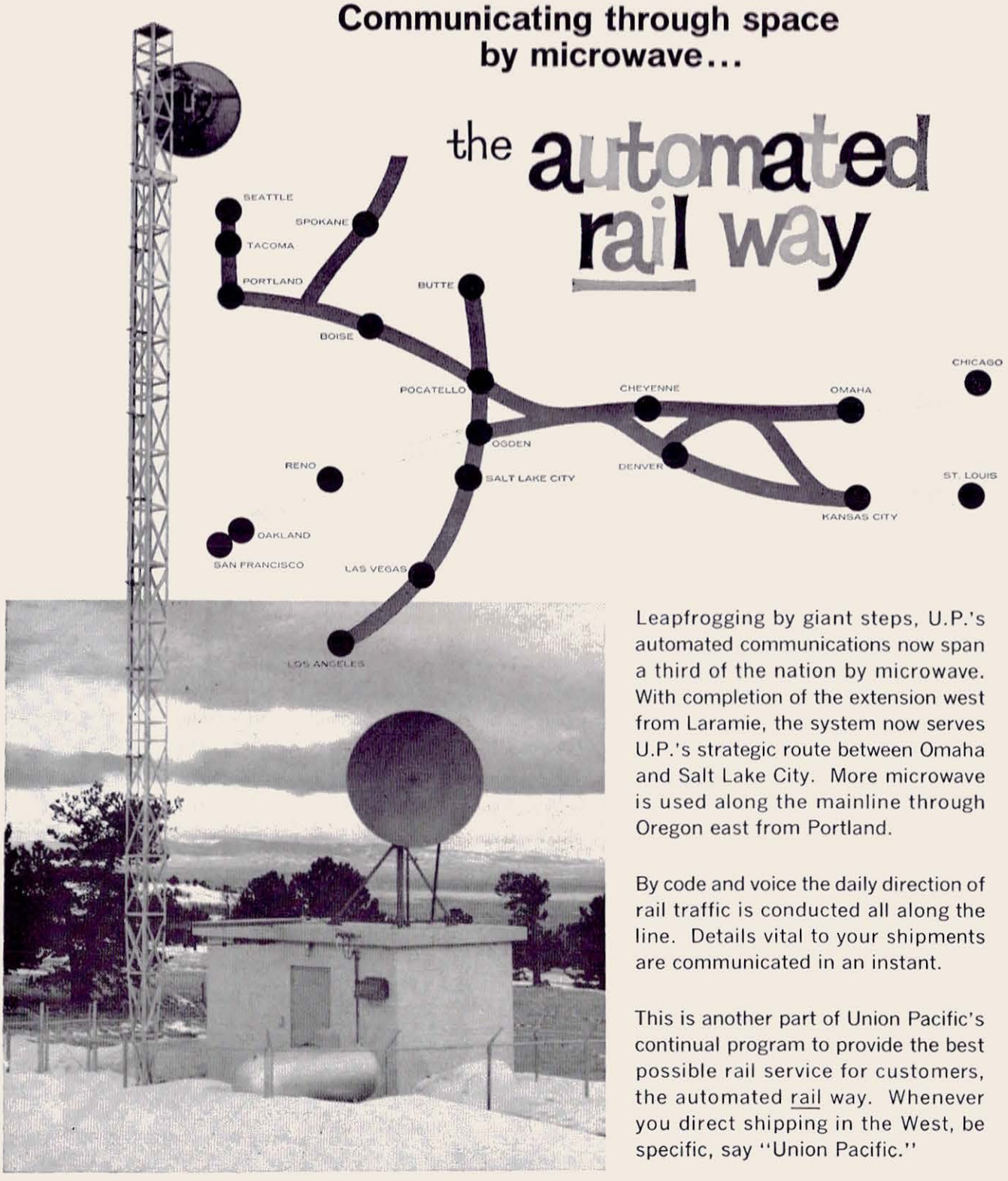
Communicating through space by microwave...

the automated rail way



Leapfrogging by giant steps, U.P.'s automated communications now span a third of the nation by microwave. With completion of the extension west from Laramie, the system now serves U.P.'s strategic route between Omaha and Salt Lake City. More microwave is used along the mainline through Oregon east from Portland.

By code and voice the daily direction of rail traffic is conducted all along the line. Details vital to your shipments are communicated in an instant.

This is another part of Union Pacific's continual program to provide the best possible rail service for customers, the automated rail way. Whenever you direct shipping in the West, be specific, say "Union Pacific."

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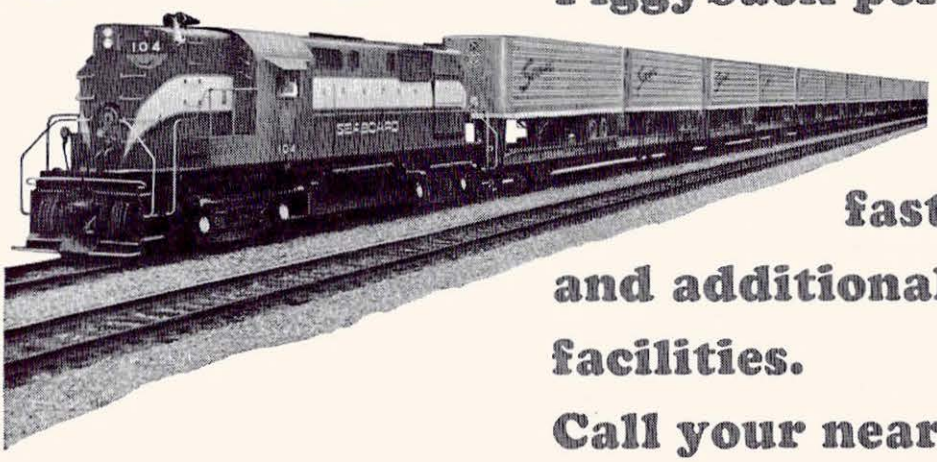

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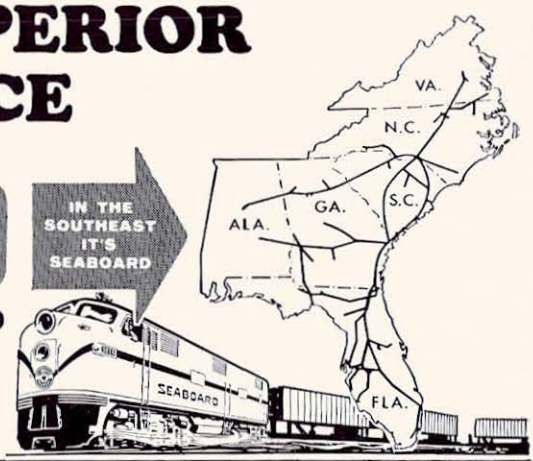
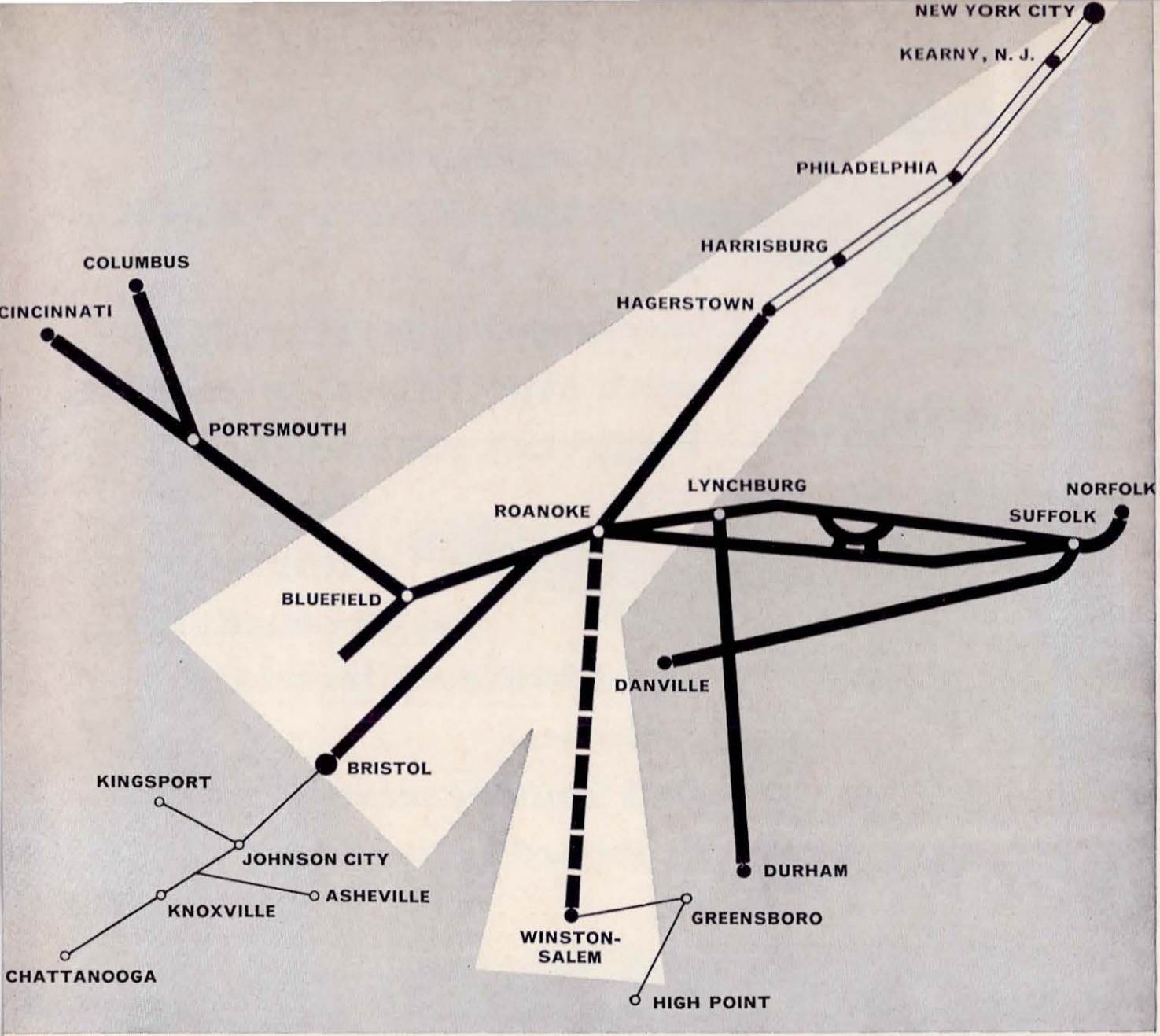
AIR LINE **RAILROAD**

IN THE SOUTHEAST IT'S SEABOARD



THE ROUTE OF COURTEOUS SERVICE

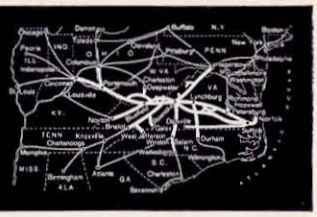


Now! High-Speed Plan III TOFC Service From Bristol, Va. To New York

It's new. It's fast. It's the latest in N&W step-ahead service. Plan III piggyback between Bristol, Va. and Kearny, N. J. Running time, 22 hours. That's comparable to motor carriers, but the cost is substantially less. Intermediate stops are at Harrisburg and Philadelphia. This new run will serve plants in eastern Tennessee and western North Carolina. Shipments from the Winston-Salem area will be hooked up in Roanoke, where the train becomes a piggyback special.

Service initially will be tri-weekly — departing Bristol at midnight — Mondays, Wednesdays, Fridays. Ask your N&W freight traffic representative for details, or contact Bryant R. Goodall, Assistant Freight Traffic Manager, Roanoke, Va. Either one may be able to save you lots of hours (and dollars) in moving your products to market.

N&W



Norfolk and Western Railway • General Offices • Roanoke, Va.

PIONEER and LEADER

FOR OVER 60 YEARS IN THE DEVELOPMENT AND PRODUCTION OF

SIDE FRAMES and BOLSTERS

FIRST IN DESIGN!
FIRST IN TESTING!
FIRST IN QUALITY!
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THE WIDEST RANGE OF PATTERNS AVAILABLE IN THE INDUSTRY...LOOK WITH CONFIDENCE TO ASF

AMERICAN STEEL FOUNDRIES
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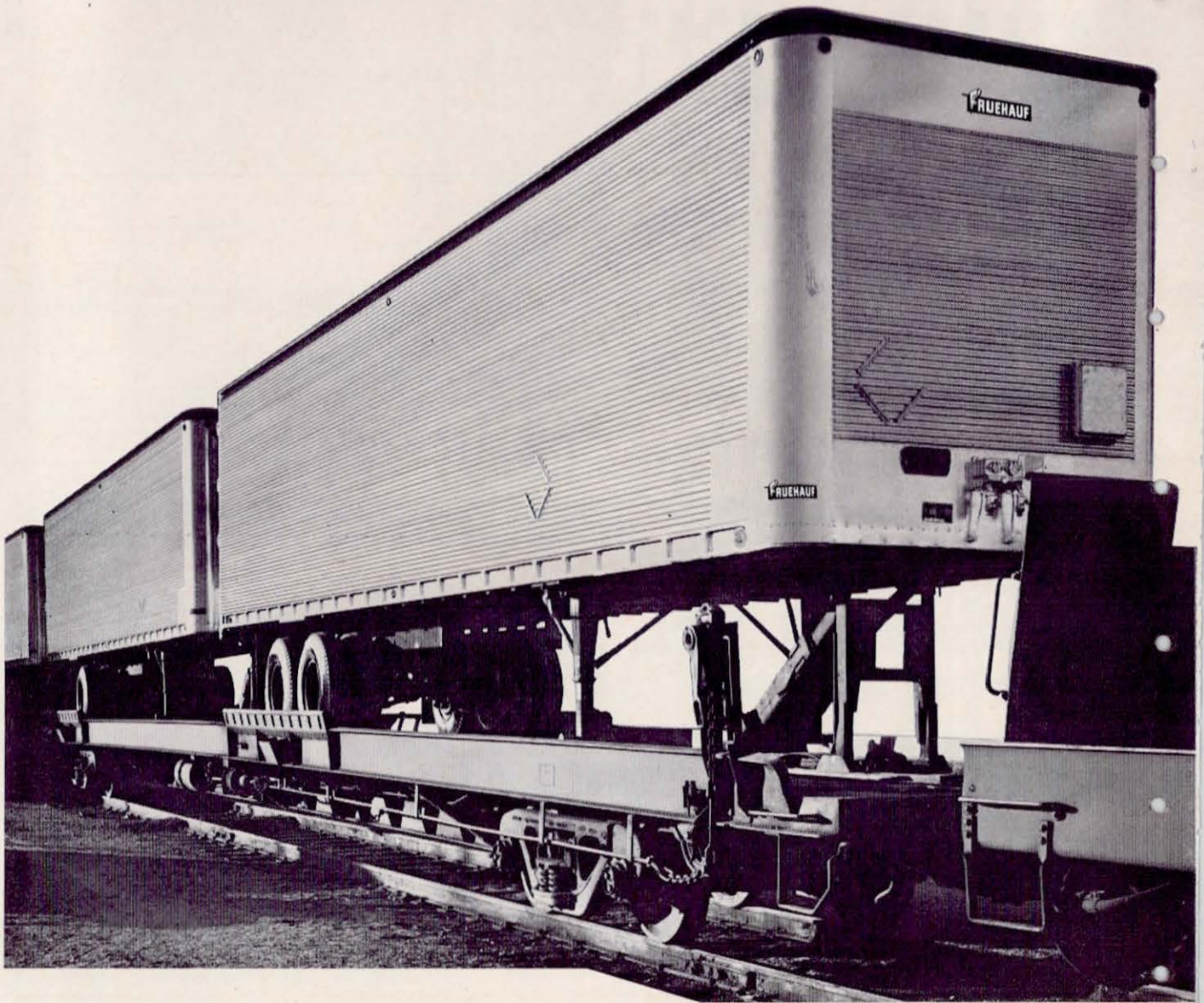
FOR SAFE, PROFITABLE PIGGYBACK USE TOUGH, RELIABLE FRUEHAUF



Fruehauf Volume ☆Vans are made to order for piggyback operation. They're strong, tightly sealed against the weather, and they give you greater cube. They feature standardized, interchangeable parts . . . and they're backed by the trailer industry's only nation-wide service facilities!

CHECK THESE FRUEHAUF PIGGYBACK FEATURES

- Special "piggyback front end"—with 8 full-height, heat-treated, heavy-duty steel posts for unmatched strength and safety.
- Wider, flatter coupler adds capacity, stanchion strength. King pin is mounted in a sturdy casting. Wide surface box members permit coupling from sharp angles.
- Stronger, lighter, two-speed square leg supports are self-lubricated—easier to operate and maintain.
- One-piece rear end—door posts, header, rear crossmember, bumper, light boxes and reinforcements are all welded into a single steel structure of exceptional strength and rigidity. Exclusive Antirax rear door latches* stabilize entire rear end when operating rear into the wind.
- One-piece, leak-proof aluminum roof—bonded to roof bows—gives positive cargo protection and extra strength.
- Complete interchangeability of steel and aluminum components.
- One-piece plymetal rear doors that seal tightly against wind, dirt and moisture.

*Fruehauf Patent Pending

PERFORMANCE TRAILERS!

Tough, reliable Fruehauf Trailers, in a wide range of types and sizes, are setting new performance records for piggybackers all over America.

Engineered and built to withstand extreme stress and strain under full piggyback loads year after year, Fruehauf Trailers give you all the features required for the most efficient piggybacking—in addition to an extra margin of strength and stamina.

They give you greater cube; all-weather, all-temperature cargo protection; greater resistance to coupling impacts and braking forces; latest tie-down equipment; full range of piggyback options; and they're available in steel, stainless steel, and weight-saving aluminum models. Shown here are some of the most popular piggyback types—for cargoes of all kinds.

Your Fruehauf representative will give you all the reasons why you should piggyback with Fruehauf Trailers.

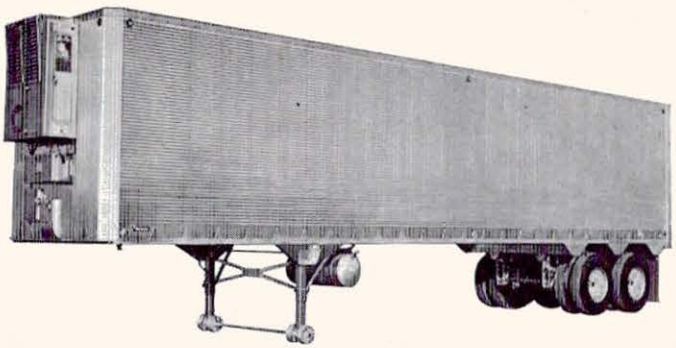
FRUEHAUF TRAILER COMPANY

10953 Harper Avenue • Detroit 32, Michigan

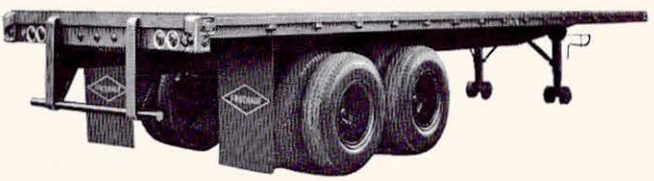
TESTS PROVE FRUEHAUFS EXCEED PIGGYBACK STRENGTH REQUIREMENTS!

In recent extensive forward and reverse tests with actual rail car equipment to determine the strains imposed by impact, Fruehauf Trailers and all associated equipment far exceeded specifications of 5 G's with 42,000 pound payloads!

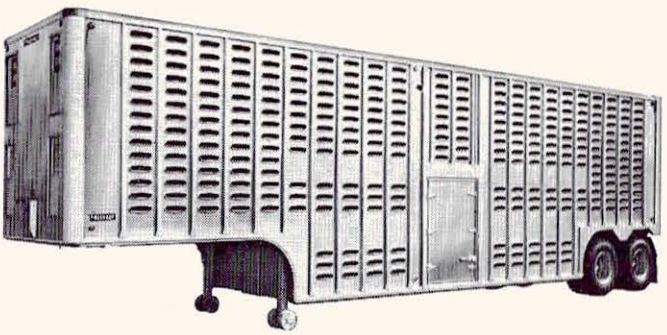
FRUEHAUF TRAILERS
A FRUEHAUF DIVISION



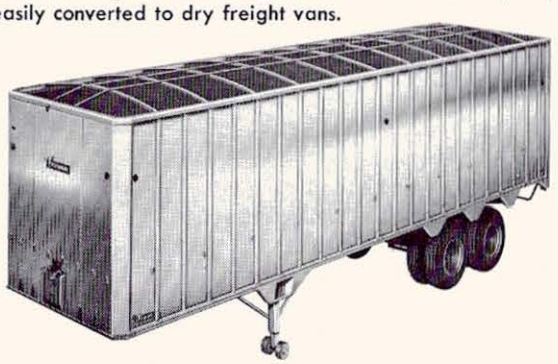
The new Fruehauf Seal-Temp Volume☆Van Reefer gives piggybackers positive temperature control, higher cube, lower operating costs! 3″ of Fruehauf's full foam insulation gives as much protection as 6″ of old-fashioned insulation, hence inside cube is increased as much as 10%.



Fruehauf heavy-duty steel "Workhorse" Platform hauls up to 50,000 lbs. . . . a 26% increase in load-to-weight ratio. Also available with sturdy, lightweight aluminum racks for fast conversion to an enclosed Trailer.

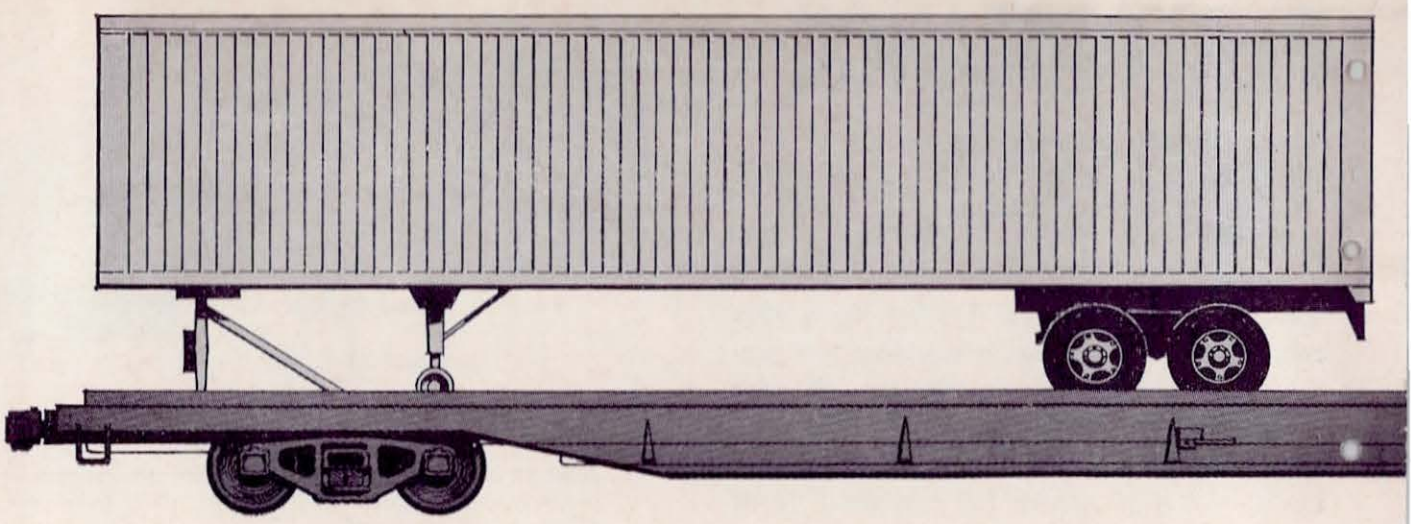


Fruehauf Livestock Volume☆Vans provide the flexibility of double-decking or triple-decking for top payloads. Also available in straight frame design. All models can be quickly and easily converted to dry freight vans.



Fruehauf Open Top Volume☆Vans are available in aluminum, steel, or aluminum and steel. Feature rugged steel cap rails for greater sidewall rigidity and top loading. A top performer for hauling general freight of all types not requiring the protection of a fully-enclosed body.

"ENGINEERED TRANSPORTATION"—The Key to Transportation Savings



Why (USS) High Strength Steels in new cars are big money makers

Railroads are recapturing freight business with new cars designed to do specific jobs at *lower costs*. 85-foot tri-level flat cars each haul 12 to 15 automobiles. A new ore car carries 5½ tons more but is shorter and lighter than cars previously used.

Many of these new car designs are possible because of the development by U. S. Steel of a family of high strength steels to give carbuilders just what they need to produce stronger, lighter, less expensive cars. High strength steels have high shock resistance and a modulus of elasticity about three times that of light-metal alloys.

USS COR-TEN brand steel was our first high-strength low-alloy steel, and the industry's first. COR-TEN Steel has a yield point of 50,000 psi and exceptional resistance to atmospheric corrosion. Nearly 400,000 cars have been built with COR-TEN Steel since its introduction in 1933 . . . and most of them are still in service today, thirty years later.

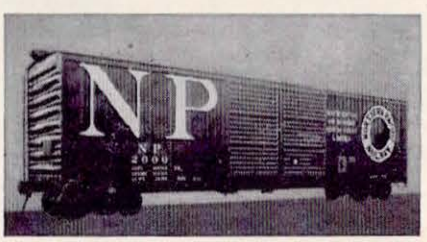
This mark tells you a product is made of modern, dependable Steel.

With stronger, tougher, more corrosion-resistant COR-TEN Steel, freight cars can be made with reduced section thicknesses to cut dead weight and increase payload without any sacrifice of strength. When COR-TEN Steel is used in the same thicknesses as structural carbon steel, the cars weigh no more but give increased life—50% longer is not unusual—before major overhaul.

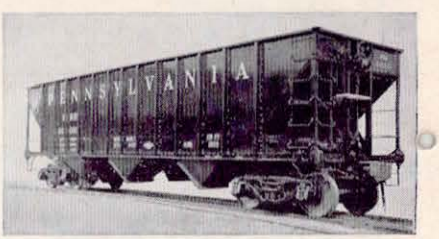
And you get the extra benefit of longer paint life on COR-TEN Steel.

USS TRI-TEN High-Strength Low-Alloy Steel has the same high yield point as COR-TEN brand — 50,000 psi minimum. It is one of the toughest high-strength low-alloy steels available, and is specially suited to low temperature service. In addition, USS TRI-TEN Steel has good weldability. It resists shock loads and abrasion and its atmospheric corrosion resistance equals that of copper steel. These advantages have made USS TRI-TEN Steel widely used for center sills, car frames, and other heavy-duty parts.

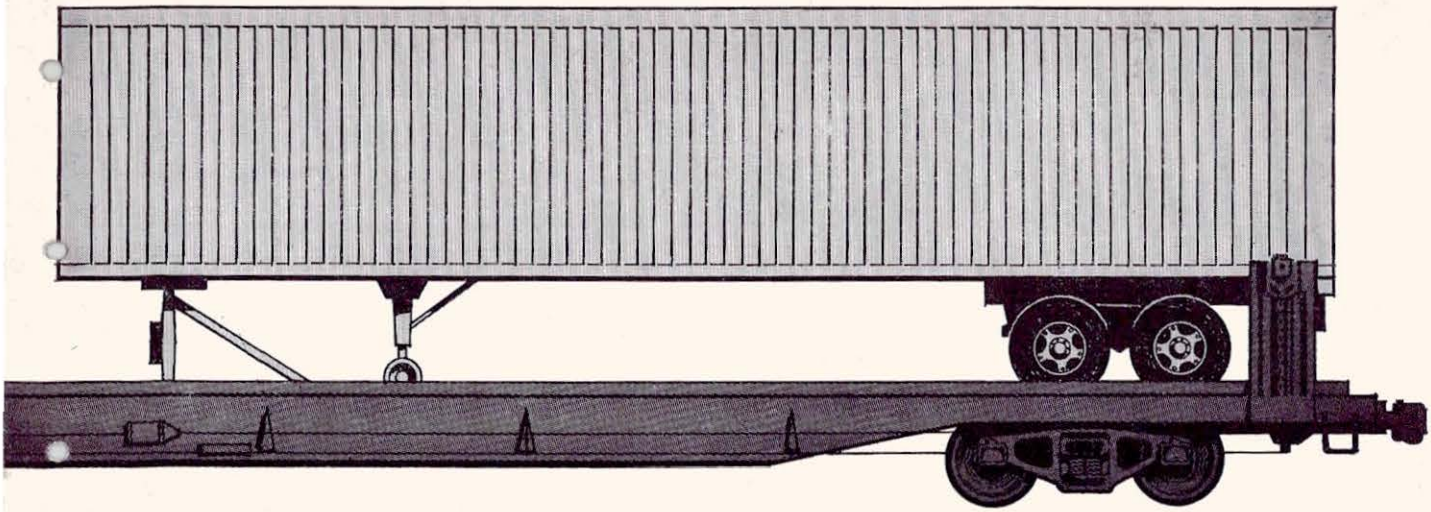
USS EX-TEN brand, the newest member of our high strength family, has the best strength to cost ratio. It is made in five grades with yield points of 45,000, 50,000, 55,000, 60,000 and 65,000 psi minimum, and has a wide range of product availability. USS EX-TEN Steel fills the need for an economical high strength steel for applications in which greater



650 box cars were built with USS COR-TEN Steel for greater payload capacity combined with lower operating and maintenance costs.



Standardized 70-ton hopper car built with USS COR-TEN Steel to obtain three economic benefits: (1) longer car life, (2) lower maintenance costs, and (3) greater equipment availability.



strength, to gain weight reduction, is the primary need.

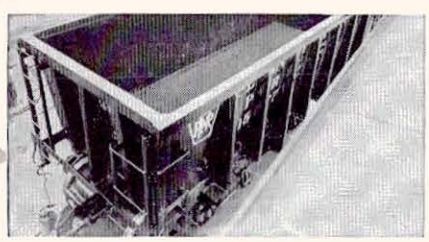
Atmospheric corrosion resistance is the same as for carbon steel. Weldability and ductility are good.

For further information, write United States Steel, 525 William Penn Place, Pittsburgh 30, Pennsylvania. USS, COR-TEN, TRI-TEN, and EX-TEN are registered trademarks.

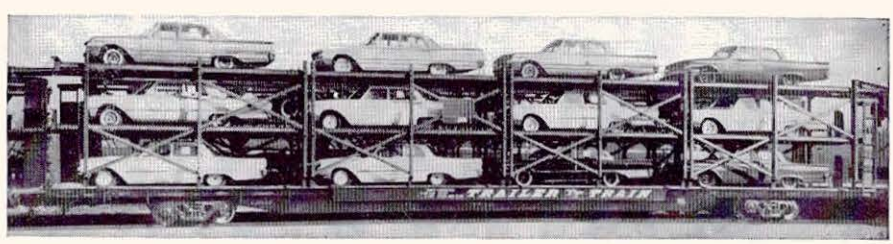
United States Steel Corporation • Columbia-Geneva Steel Division • Tennessee Coal and Iron Division
United States Steel Supply Division
United States Steel Export Company

Mechanical Properties

BRAND SIZE	COR-TEN 2½" and under	TRI-TEN ¾" and under	EX-TEN 45 1½" and under	EX-TEN 50 1½" and under	EX-TEN 55 ¾" and under	EX-TEN 60 ⅜" and under	EX-TEN 65 ⅜" and under
Yield point, min., psi	50,000	50,000	45,000	50,000	55,000	60,000	65,000
Tensile strength, min., psi	70,000	70,000	60,000	65,000	70,000	75,000	80,000
Elongation in 8", min., %	19	18	19	18	17	16	15
Resistance to atmospheric corrosion	4 to 6 times carbon	2 times carbon steel	Equal carbon steel	Equal carbon steel	Equal carbon steel	Equal carbon steel	Equal carbon steel



Ore car built with USS COR-TEN Steel is 16 feet shorter than a standard 70-ton hopper car, weighs 5½ tons less, and has a load limit of 83 tons.



LO-DEK flat car—built 10 tons lighter and 10 inches lower with USS TRI-TEN Steel. Carries 12 to 15 automobiles, two truck trailers or standard containers. *LO-DEK is a registered trademark of Pullman-Standard, a division of Pullman, Incorporated.*

USS **United States Steel**

For B&O Piggyback: Revolution Begins

A former trucker has taken charge of the road's TOFC operations. Result: B&O has moved strongly into Plan V—and it's working to install a modern system to permit better equipment control.

Baltimore & Ohio piggyback trailers this week are sporting a bright new emblem and the legend "Coordinated Rail-Truck Service Coast-to-Coast."

Behind this sweeping slogan is a quiet, former trucker who is staging a not-so-quiet revolution in B&O's rail-highway services.

Since his arrival in Baltimore last January, E. W. Wright, general manager of B&O's newly-created Trailer Service Department, has given B&O a big push into Plan V piggybacking and has laid the groundwork for the installation of an up-to-date system of equipment control.

• **Piggybackers can learn.** As a former trucker—he was president and general manager of Southern Plaza Express, Inc., a Dallas subsidiary of Ryder System, before joining B&O—Mr. Wright is convinced that rail piggybackers can learn something from truckers in the areas of equipment control, costing, balance of traffic and terminal operations.

In keeping with the national trend, rail-highway traffic on the B&O has been increasing steadily since the road entered the business in 1954. Last year, with a volume of 50,000 trailers, revenues were up 42% over 1962. This year, with traffic moving at the rate of 4,730 trailers a month, piggyback revenues should easily top $12 million.

About 80% of B&O's piggyback volume now moves under Plans II and III. Mr. Wright predicts a 20% to 25% annual increase in piggyback traffic over the next few years, thinks the biggest gains will be made in Plan III and V movements.

Last week Mr. Wright and his staff were busily negotiating with some 200 motor carriers as a first step in setting up a widespread Plan V operation which will offer shippers joint haulage at joint rates. In contrast with other Plan V operations which are based on a single motor carrier in a single area, B&O plans to cooperate with as many motor carriers as possible whenever the traffic is mutually attractive.

• **Plug for Plan V.** "The popularity of Plan V operations," says Mr. Wright, "underlines the fact that shippers and receivers have accepted the intermodal concept, and I believe the future will include expansion of the through-rate philosophy—not only between railroads and trucks, but between all forms of transportation."

E. W. Wright

Mr. Wright, however, sees one big problem. "Unless the division of revenues is right," he says, "motor carriers will soon become disenchanted. The only way motor carriers are going to provide joint service on a continuing basis for shippers is if the traffic is mutually advantageous."

Along with Plan V traffic, Mr. Wright predicts substantial increases in B&O's Plan III piggyback business.

Generally, he regards piggyback as "the breakthrough to transportation diversification—and by developing the various plans aggressively, complete diversification can yet evolve. The only limits to the success of piggyback are the limits the railroads will put on it themselves."

Conventional rail service, Mr. Wright points out, "does not parallel that of the motor carrier and for this reason has been ineffective in curbing the erosion of traffic to the highway. Piggyback is designed to meet or beat truck competition, and has proven capable of not only arresting the erosion but of also restoring high-grade tonnage to the railroads. Piggyback's forte is that it is not circumscribed and restricted by the areas served by the railroads. Piggyback, therefore, competes with the flexibility of motor-carrier service." Still, however, there are problems.

• **Sales handicap.** In selling rail-highway services, Mr. Wright thinks, sales departments have too often been laboring under a major handicap: The bits and pieces that go into the operations of piggyback have been the responsibility of too many people. This is one of the major factors that led B&O, as it has other roads, to set up a separate rail-highway department. Now, B&O is talking about going one step further, setting up a corporate entity for its piggyback operations.

As a former trucker, Mr. Wright is convinced there is considerable room for improvement in railroad pricing and equipment-control techniques.

"While the railroads have been procedurally correct in pricing trailer services, there is not enough examination of the rates and no satisfactory efforts to cost traffic out," he says. "Rather, rail piggyback services have been priced primarily to compete with trucks."

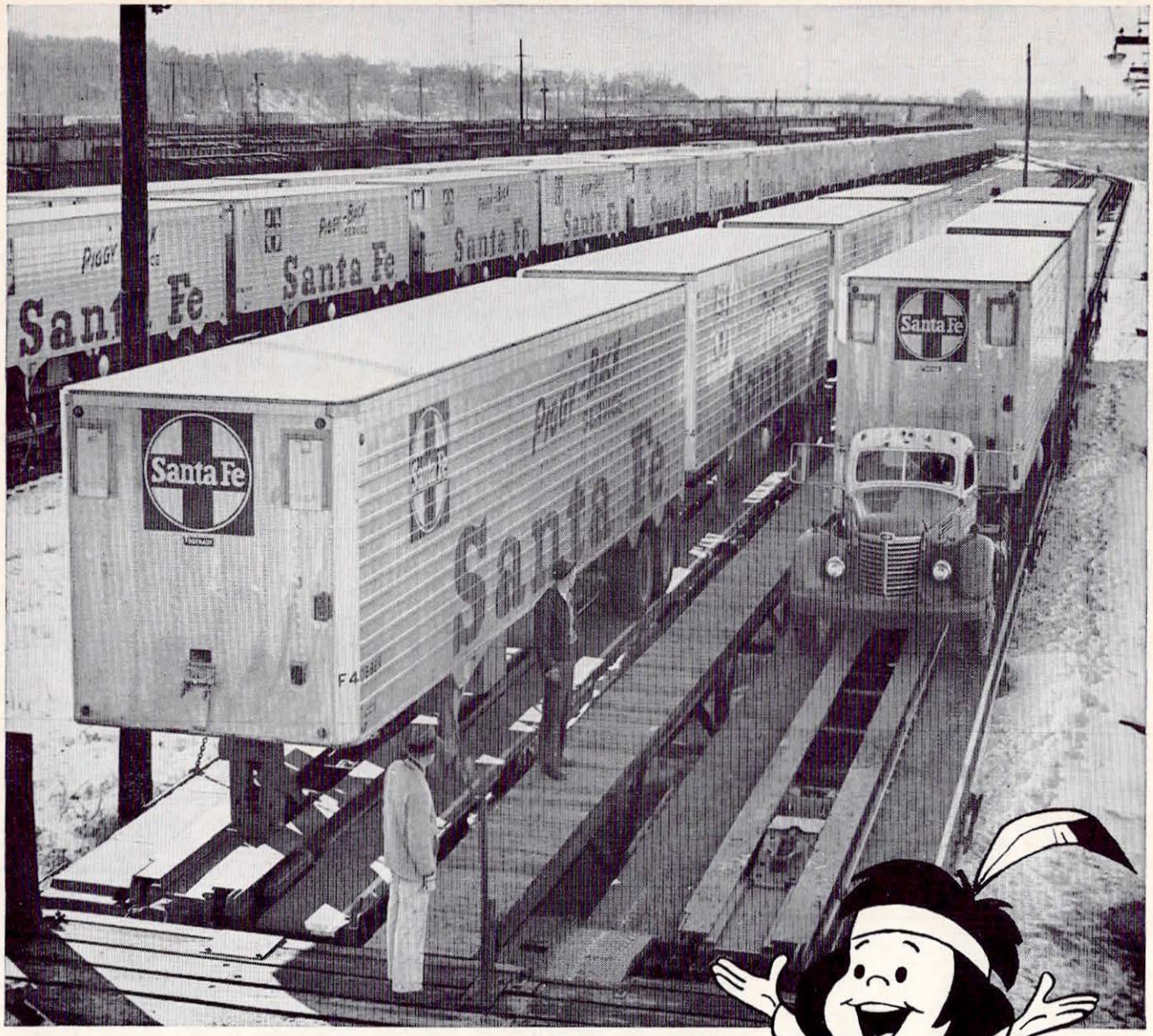
Piggyback, Mr. Wright feels, permits the railroads for the first time in years to develop a completely new approach to ratemaking. "Piggyback costs," he notes, "are relatively easy to ascertain as compared with other rail services. This, together with the service potential, gives us an opportunity to make competition rather than just meet it.

"Piggyback is generally more expensive than box-car movement. The investment in equipment is higher and, where the railroads provide full service, terminal costs are higher. But, by avoiding terminal and branch-line delay, piggyback provides a better service than box-car and is the equivalent or better than truck service."

• **Equipment utilization.** "The differential in profit potential to the railroad and savings to the shipper," he adds, "lies in the utilization factor—plus the opportunity, with appropriate sales effort, for balance. Here we have the opportunity to use one of the railroads' biggest problems as a weapon. Empty trailer-miles are more easily filled with good salesmanship than are empty special-equipment miles."

On the B&O, Mr. Wright is preparing to take full advantage of this opportunity.

"Equipment control," he says, "is the



Santa Fe the PIGGY-BACK way

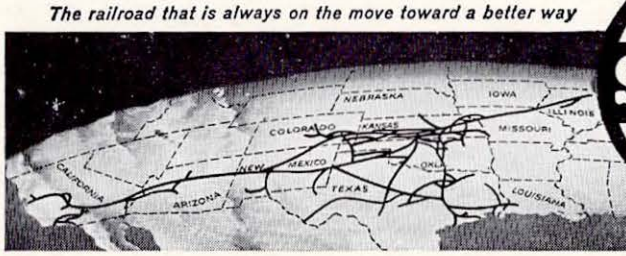
Si! Si! Chico. This modern service is so big on the Santa Fe almost every train now carries piggy-back cars.

Santa Fe's Piggy-Back fleet is one of the most modern in the nation with trailers of all types: refrigerated for perishable and frozen foods; insulated to protect special commodities; flat beds for shipment of unusual sizes and shapes.

New trailers are now on order to take care of your growing needs for Santa Fe Piggy-Back service. More are to be added as a part of our program of "keeping always on the move toward a better way" to serve you.

Let your nearest Santa Fe representative give you the facts about piggy-back

The railroad that is always on the move toward a better way



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B&O'S TRAILER SERVICE affords coordinated rail-truck operation on export, import and intercoastal traffic between shipside and plant platform.

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"It is highly questionable whether the same philosophy can be applied to piggyback equipment.

"If we assume 500 miles represents a trip, a trucker figures he has to get at least 12 trips a month out of a trailer. Most railroads are getting only three to five. On the B&O, we're averaging less than three."

• **Where B&O stands.** "It's not difficult to figure out just where any railroad stands as far as utilization is concerned. In the case of the B&O, our situation on any given day looks like this: We will have somewhere around 500 loaded units moving to destination; about 300 units en route to satisfy actual or anticipated demands; and about 700 or 800 units holding—either for loading, awaiting instructions or just being ignored."

"At the same time," continues Mr. Wright, "I am sure that at some location freight sales is demanding placements which cannot be made because of maldistribution. It's pretty obvious that if this situation is repeated regularly, our railroad has three times as much trailer equipment as they think they have.

"Actually, we just don't control trailer movements as efficiently as we should. Conversely, motor carriers are greatly preoccupied with intricate and, by now, quite sophisticated methods of control. The recognition that utilization and balance are economic necessities has long been an important factor in truck-line thinking, and it should be in ours since nearly all of our piggyback rates are motor-compelled."

Improved utilization

"A good deal of motor-carrier equipment utilization improvement," contends Mr. Wright, "stems from the recognition that projection of requirements, at least on a minimum basis, is possible. Traffic patterns are studies by area and by season. Marketing research is employed to provide estimates on added traffic which can be expected between gateways. Sales departments provide details of specific movements which go into the planning hopper. As a result, motor lines generally achieve better than three times the utilization from their trailer fleets than the railroads do."

• **Control problem attacked.** Mr. Wright has aready started applying motor-carrier thinking to B&O equipment-control problems, is attempting through advanced data-processing techniques to project B&O's trailer requirements at its various piggyback stations and to determine where and how equipment can be better utilized.

"We can develop statistics to show minimum requirements at our location," says Mr. Wright. "Once this has been done, we can deliver or promise delivery at any time or place. Once the system is in operation, it will help us check our service and our operations, and it will also indicate where more sales activity is needed to help us develop balance."

B&O's Trailer Service Dept. has already set up a fundamental card-control system indicating the movement and location of its piggyback equipment. Later the cards will be key punched and the operation will be computer controlled.

"Incidentally," adds Mr. Wright, "we're using a man trained in data processing—not dispatching—to set up the system."

To serve its customers B&O has some 1,000 trailers and containers, has another 217 trailers on order.

Containers account for about 30% of total units. Mr. Wright sees little enthusiasm at present on the part of shippers, or truckers for that matter, for containers, but admits that containerization will probably increase.

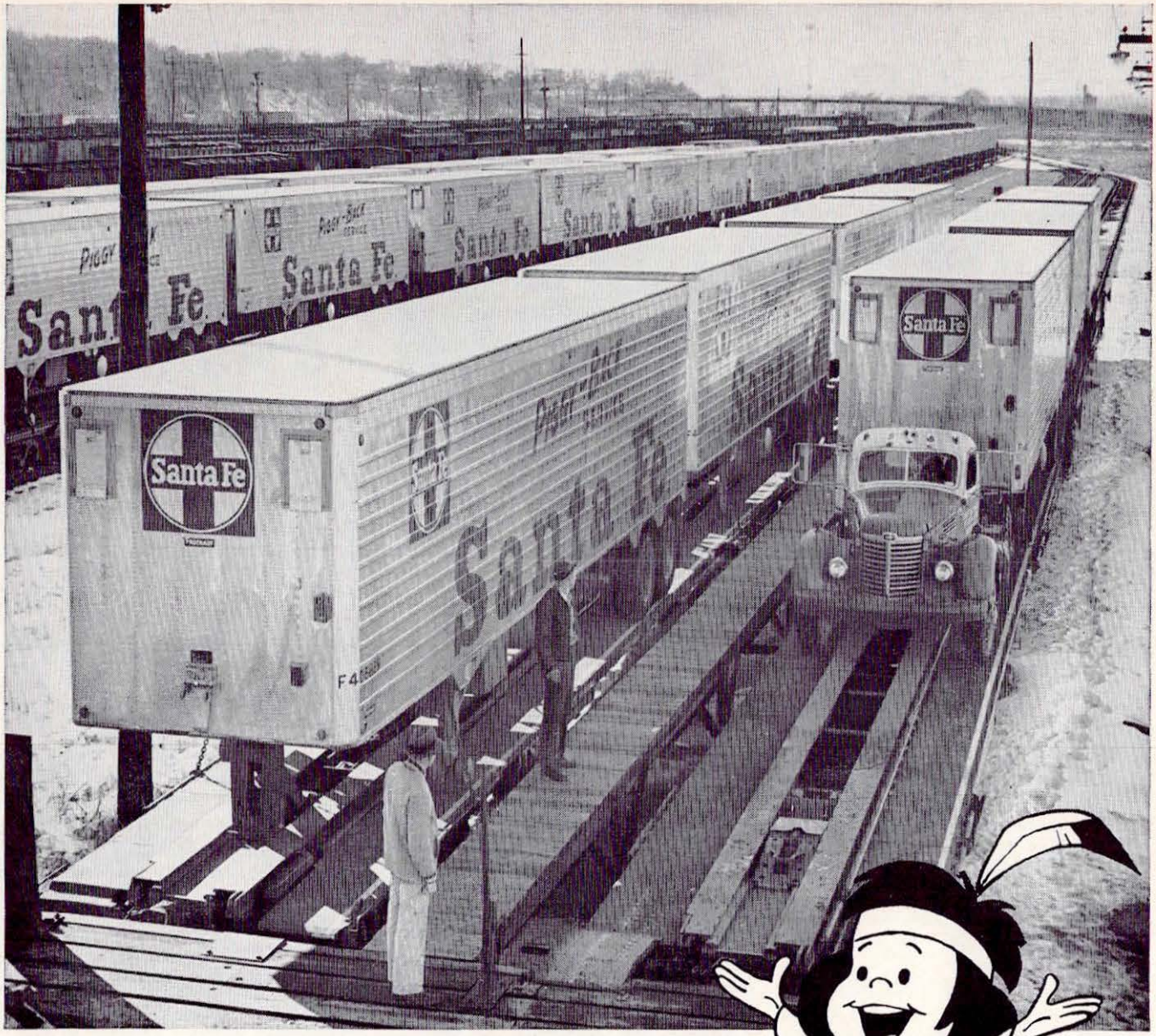
"While demountable containers will be important in intermodal service," he says, "the basic piggyback unit will probably be a trailer. Unless shippers are exporting they normally prefer wheel units."

• **Containers: How popular?** "Containers," notes Mr. Wright, "have been employed to solve the physical problems of the railroads. It's true that they usually save one-third the weight of a trailer when hauled by rail, and their lower height reduces clearance problems. But the cost of a container usually exceeds that of a wheel unit by $1,000, and the distribution of chassis separate from bodies is an administrative headache, because a sufficient number of chassis or bogies must be maintained at each location to handle peak volume."

"At small-volume locations where cranes are not justified," continues Mr. Wright, "unloading is awkward and costly. Most roads using containers have to get around this problem by loading complete units to low-volume destinations."

While trailers may remain the basic piggyback unit, they still present what Mr. Wright considers one of the biggest problems facing piggyback operators.

"The technique of loading and unloading these trailers is one problem we've got to lick," he says. "We can install gantry or straddle cranes in our high-volume yards, although I've seen skilled drivers load and unload circus fashion just as fast as some of our best cranes can do the job—and with less expense. We will, I am sure, develop a system which will permit unloading anywhere without the need for expensive accessorial equipment for the service."



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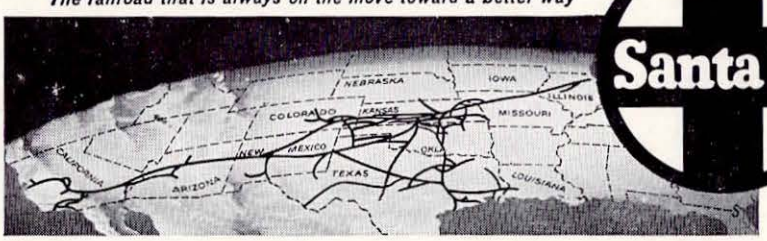

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"Actually, we just don't control trailer movements as efficiently as we should. Conversely, motor carriers are greatly preoccupied with intricate and, by now, quite sophisticated methods of control. The recognition that utilization and balance are economic necessities has long been an important factor in truck-line thinking, and it should be in ours since nearly all of our piggyback rates are motor-compelled."

Improved utilization

"A good deal of motor-carrier equipment utilization improvement," contends Mr. Wright, "stems from the recognition that projection of requirements, at least on a minimum basis, is possible. Traffic patterns are studies by area and by season. Marketing research is employed to provide estimates on added traffic which can be expected between gateways. Sales departments provide details of specific movements which go into the planning hopper. As a result, motor lines generally achieve better than three times the utilization from their trailer fleets than the railroads do."

• **Control problem attacked.** Mr. Wright has aready started applying motor-carrier thinking to B&O equipment-control problems, is attempting through advanced data-processing techniques to project B&O's trailer requirements at its various piggyback stations and to determine where and how equipment can be better utilized.

"We can develop statistics to show minimum requirements at our location," says Mr. Wright. "Once this has been done, we can deliver or promise delivery at any time or place. Once the system is in operation, it will help us check our service and our operations, and it will also indicate where more sales activity is needed to help us develop balance."

B&O's Trailer Service Dept. has already set up a fundamental card-control system indicating the movement and location of its piggyback equipment. Later the cards will be key punched and the operation will be computer controlled.

"Incidentally," adds Mr. Wright, "we're using a man trained in data processing—not dispatching—to set up the system."

To serve its customers B&O has some 1,000 trailers and containers, has another 217 trailers on order.

Containers account for about 30% of total units. Mr. Wright sees little enthusiasm at present on the part of shippers, or truckers for that matter, for containers, but admits that containerization will probably increase.

"While demountable containers will be important in intermodal service," he says, "the basic piggyback unit will probably be a trailer. Unless shippers are exporting they normally prefer wheel units."

• **Containers: How popular?** "Containers," notes Mr. Wright, "have been employed to solve the physical problems of the railroads. It's true that they usually save one-third the weight of a trailer when hauled by rail, and their lower height reduces clearance problems. But the cost of a container usually exceeds that of a wheel unit by $1,000, and the distribution of chassis separate from bodies is an administrative headache, because a sufficient number of chassis or bogies must be maintained at each location to handle peak volume."

"At small-volume locations where cranes are not justified," continues Mr. Wright, "unloading is awkward and costly. Most roads using containers have to get around this problem by loading complete units to low-volume destinations."

While trailers may remain the basic piggyback unit, they still present what Mr. Wright considers one of the biggest problems facing piggyback operators.

"The technique of loading and unloading these trailers is one problem we've got to lick," he says. "We can install gantry or straddle cranes in our high-volume yards, although I've seen skilled drivers load and unload circus fashion just as fast as some of our best cranes can do the job—and with less expense. We will, I am sure, develop a system which will permit unloading anywhere without the need for expensive accessorial equipment for the service."

Piggybacking Perishables?

These leading railroads protect piggyback cargoes with dependable, proven

THERMO KING

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ILLINOIS CENTRAL
KANSAS CITY SOUTHERN
LOUISVILLE & NASHVILLE
MILWAUKEE ROAD
MISSOURI-KANSAS-TEXAS
MISSOURI PACIFIC
NEW YORK CENTRAL
NICKEL PLATE
NORTHERN PACIFIC
PACIFIC FRUIT EXPRESS
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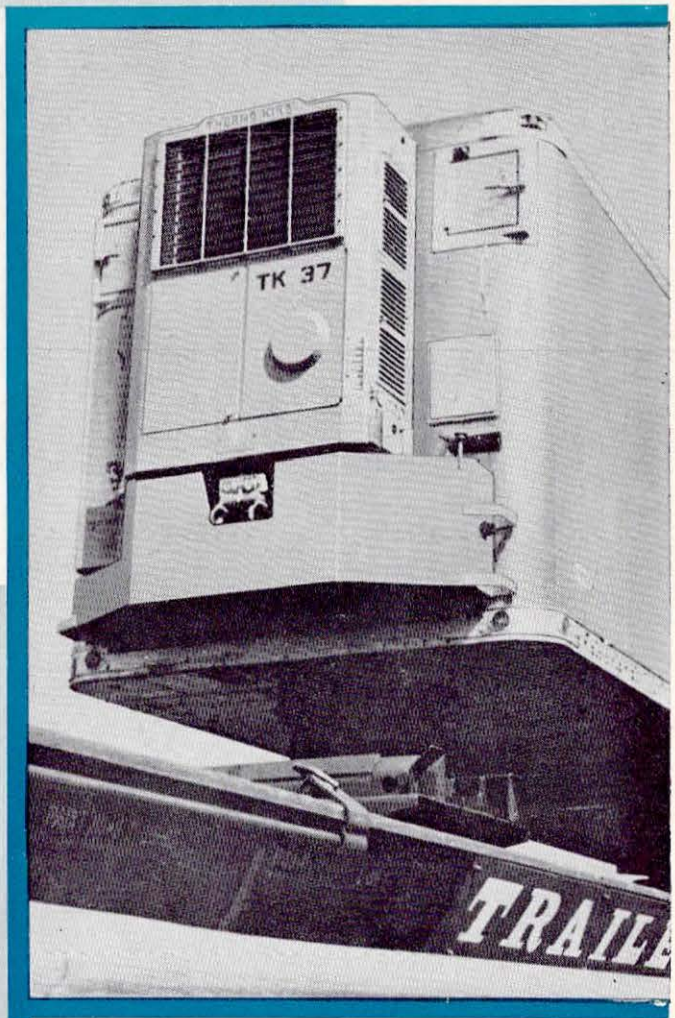

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TR-1074

... to get into this picture

One way to realize more revenue in piggy-back and container service is to avoid needless repair bills. That is why more and more railroads are specifying Trailmobiles.

They find that Trailmobile's ability to achieve exceptional strength within practical weight limits cuts down sharply on nagging maintenance costs that deduct from profit. For instance, they find in Trailmobile vans a kingpin mounting that will handle *continuously applied loads up to 210,000 pounds.* They find *more strength at the rear* with extra hinges and extra locks and locking bars. They find *extra reinforcing up front* including a "wrap-around" steel bulkhead that is welded to the second side posts. They find *extra protection on top* in a "drum-tight" one-piece roof that in installed and held under permanent tension. And they find in T/M's nation-wide parts and service facilities—in 52 cities—another convenience that translates into savings.

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New Markets Open to Southern's COMAR

In cooperation with six eastern and southern motor carriers, Southern is pushing its new Plan V operation. The predicted '63 increase in the road's piggyback business: a minimum 300%.

For shippers from Maine to Mississippi, the Southern's new Coordinated Motor and Rail (COMAR) service is opening up new doors and new markets. For the Southern, this Plan V piggyback service, after only five months of operation, promises to spur its already booming rail-highway business to new heights.

Piggyback traffic on the Southern has been growing by leaps and bounds since the road first entered the field in the fall of 1960.

In 1961, Southern loaded 3,733 cars of piggyback traffic. Last year it loaded 12,113.

● **Increase continues.** For the first five months of this year, Southern's piggyback traffic was up close to 300% over the same period in 1962. By the end of May the railroad had moved 18,632 trailers and containers carrying rail-highway traffic. During the same five months in 1962 the road handled 6,497 units.

While most of the 61 Class I roads offering piggyback services are reporting substantial traffic increases this year, Southern alone is accounting for about 20% of the national increase.

With COMAR now in operation and expanding, Southern is predicting a minimum increase of 300% in rail-highway traffic for 1963. A substantial hunk of this will come from the new Plan V service which provides joint haulage on joint rates with motor carriers. COMAR, after only five months of operation, already accounts for 8% of Southern's total piggyback business. By the end of this year, the road expects this Plan V traffic to about equal the substantial volume it is now handling under Plan III.

Southern launched COMAR last January in cooperation with six eastern and southern motor carriers, has since added another in the East and in the South.

Participating motor lines are: Yale Express Service, Inc., New York; Burgmeyer Brothers, Inc., Reading, Pa.; Georgia Highway Express, Inc., Atlanta, Ga.; Floyd and Beasley Transfer Co., Inc., Sycamore, Ala.; Hall Motor Express, Inc., Birmingham, Ala.; Huckabee Transport Corp., Columbia, S.C.; West Brothers, Jackson, Miss.; and Interstate Freight System, Grand Rapids, Mich.

● **Expansion is planned.** Plans are in the works for further expansion, and other motor carriers will probably join the arrangement before the end of the year.

Under the present system COMAR, which is designed primarily to handle LCL traffic in containers, is set up to serve shippers in New England, the Atlantic Seaboard states and South Carolina, Georgia, Alabama and Mississippi in the South, as well as Charlotte, N.C., and Chattanooga, Tenn.

Shippers need deal only with the originating motor carrier which gives them the advantage of single carrier responsibility and control. The shipment moves on a single bill of lading and the shipper gets only one bill.

One of COMAR's biggest advantages for shippers is speed. This coordinated motor and rail service has cut 24 to 48 hours off transit times. On shipments from the South to New England, for example, shippers can save as much as a full day's time.

Railroad 'middleman'

Southern is the middleman. On shipments from the New York City area to the Atlanta area, for example, Yale Express picks up merchandise in New York and delivers it to the Southern's crane facility in Alexandria, Va. From Alexandria, Southern moves the container to Atlanta, where it is picked up by Georgia Highway Express and delivered to the receiver.

Before launching COMAR, Southern had carefully investigated the idea of turning to authorized substitute highway service to handle LCL traffic, decided instead that as long as it could get regional motor carriers to cooperate, rail-highway coordination was the answer.

● **Recaptures traffic.** On the basis of early results, Southern thinks this Plan V arrangement is not only a practical approach to the LCL problem, but promises to bring a good hunk of this traffic back to the rails.

"COMAR," says Assistant Vice President W. V. Burke, "is a living example of true rail-highway coordination. We are using the best regional motor carriers in this service, and are offering real competition to long-distance motor carriers."

Mr. Burke heads Southern's Rail-Highway Department which was set up in March 1961, and which is staffed with people from the motor carrier industry and the industrial traffic field. Mr. Burke was manager of national accounts and fleet sales for Mack Trucks before joining the Southern. Prior to that he had been in the industrial traffic field.

The COMAR service is about 99% containerized, utilizing mainly 40-foot aluminum containers. With its clearance problems, Southern has emphasized containerization since it entered the piggyback field. Today, at least 40% of its total rail-highway traffic moves in containers, and this figure is rapidly approaching 50%.

● **Less chance of damage.** With modified Trailer-Train flatcars equipped with protecto-frames, Southern claims it can give containers a better ride, with less chance of damage to cargo than with trailers or complete motor vehicles.

With Plans II, III, IV and V in operation, Southern offers shippers one of the most complete services in the piggyback field.

"Our Plan III," says Mr. Burke, "is designed for shippers with at least two trailers to offer at the time-volume. Plan II is for shippers with one trailer or container. Plan V, which offers fast LCL service, rounds out our service package. Today," he adds, "we have a greater variety of surface transportation than any railroad has ever been able to offer."

Currently, Plan III accounts for about 85% of Southern's total piggyback volume, with Plan II ranking second.

With the steady increase in containerized piggyback traffic, Southern last year acquired by lease or purchase 553 40-foot containers; 66 40-foot open top containers; 20 10-foot containers; 40 5-foot containers; 40 40-foot Flexi-Van refrigerated containers; 40 40-foot Flexi-Van dry containers; 60 Flexi-Van bogies; 25 Mark III Flexi-Van cars; 588 trailer chassis; 16 20-foot flatbed trailer chassis; 4 drop-frame trailers; 50 flatbed trailers; and 10 rail-drop trailers.

With these latest acquisitions, Southern now has a stock of 1,147 40-foot containers—dry, van refrigerated, insulated and open top—911 chassis or bogies and 214 trailers, including flatbed, drop frame, van and open-top types.

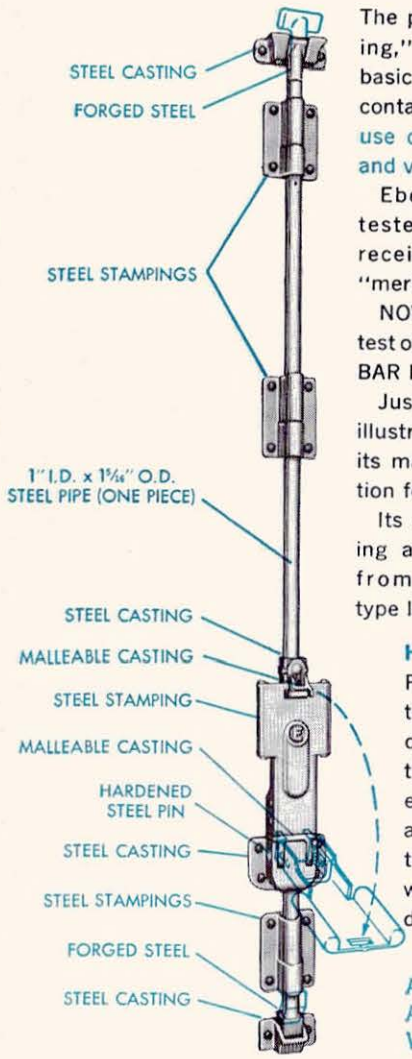
Eberhard Proudly Presents

THEIR "PIGGYBACK" CONTAINER LOCKS

THE ALL NEW PULL-PUSH · THE TIME & USE TESTED

8032 BAR LOCK

5632 "JUMBO LOCK"



The phenomenal growth of "Piggybacking," has inspired a new EBERHARD basic design concept in another unique container lock. It is ideally suited for use on all "over the highway" trailers and vans.

Eberhard's popular time and use-tested JUMBO lock has been well received by the trade and cited for "meritorious service" wherever used.

NOW! — we invite you to examine and test our all new "baby" — the PULL-PUSH BAR LOCK No. 8032.

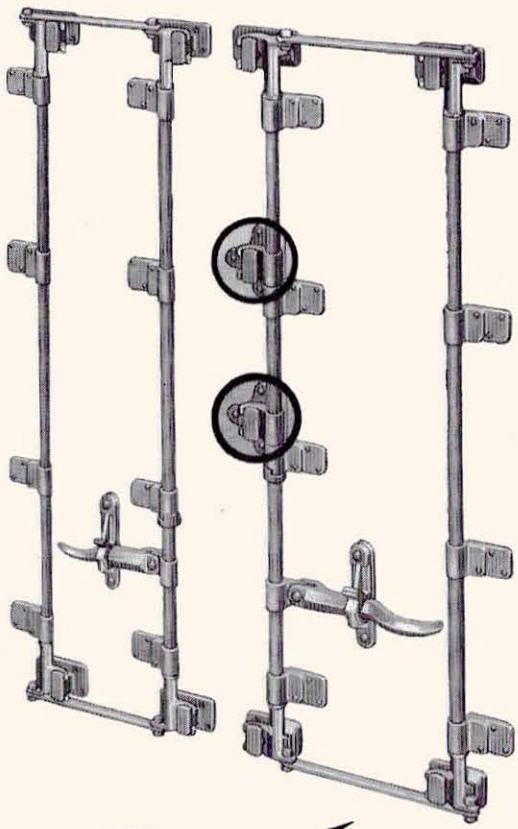
Just a quick visual inspection of its illustration here will acquaint you with its many superior design and construction features.

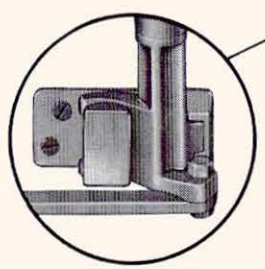
Its positive pull-unlocking, push-locking action distinguishes it exclusively from conventional rotary action type locks.

HOW IT WORKS

Pulling the handle down actuates the continuous pipe section upward disengaging the wedge bolts from their holding positions in the keepers. Closing and consequent locking action is accomplished by moving the handle upward, re-engaging the wedge bolts whose cam action produces a strong compressed seal.

Available with or without pipe.
Available in Plain or Cadmium Finish.
Weight: 43 lbs.





"JAR-PROOF LOCKING"

"T" shaped cam keepers are straddled by fork shaped locking cams.

Recessed, cast pockets hold squared lugs firmly and prevent jarring movement with possible lock disengagement.

SPECIAL OPERATIONAL FUNCTIONS AND FEATURES

- Frost Breaking Action.
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This Eberhard lock with its steel cams and keepers provides optimum protection of locks and doors from the punishing effects of service which produces a series of terrific strains on all latching and holding points.

Dual locking is accomplished with a single handle which incorporates a unique keeper design, positively anchoring the handle in locked position. Extra protection of a gravity keeper is also afforded.

Write for full particulars on either or both locks.

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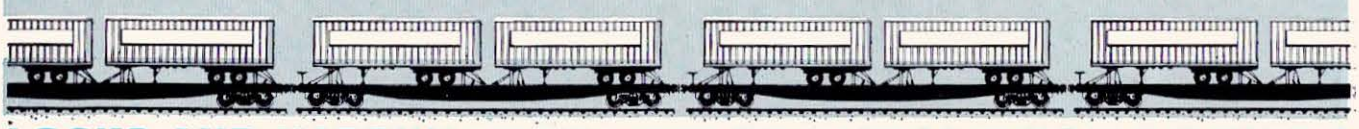
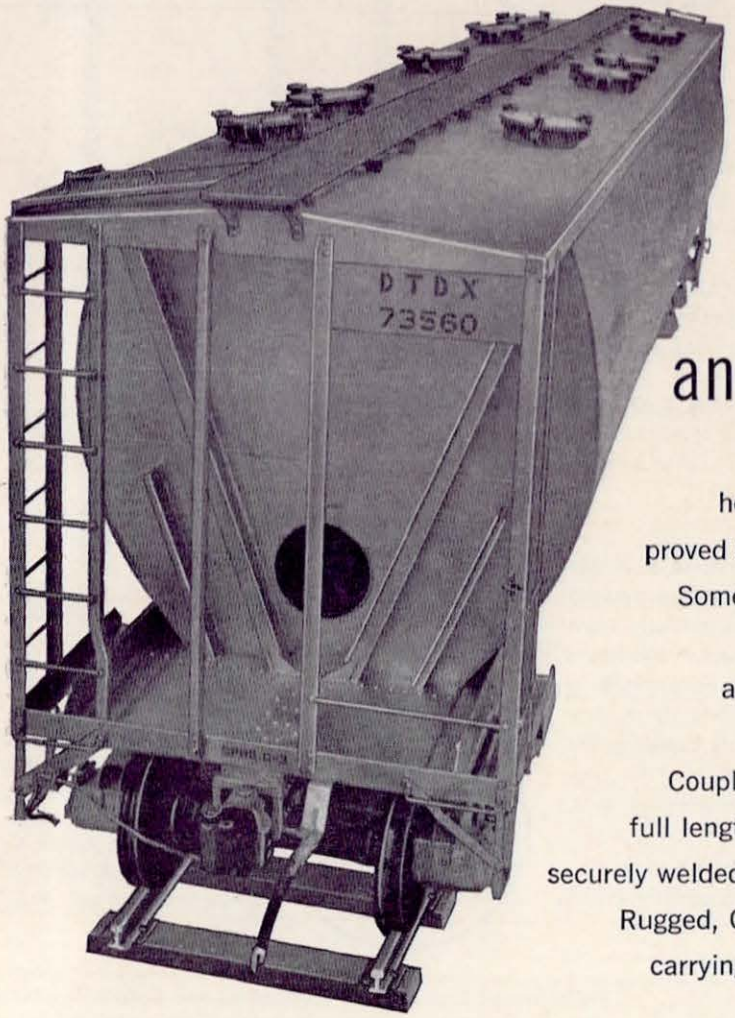


LOCKS AND HARDWARE FOR THE TRANSPORTATION INDUSTRY



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travel in these Greenville Aluminum tank-type hoppers. They utilize the time-tested Alcan design, proved in line haul service on more than 200 similar cars. Some have completed two years of trouble-free duty. The 3,900 cubic foot capacity is equally divided among three compartments. Pneumatic discharge operates from either side of the track. Coupling impact forces are evenly distributed through full length side sills and shear plates. The bolster web is securely welded to the shear plate with full-length double welds. Rugged, Greenville-built aluminum hoppers are in service carrying everything from corn to chemicals. For details about the Dow car, or any other hopper, write Greenville Steel Car Company, Greenville, Pa.

GREENVILLE STEEL CAR COMPANY

Subsidiary of Pittsburgh Forgings Company

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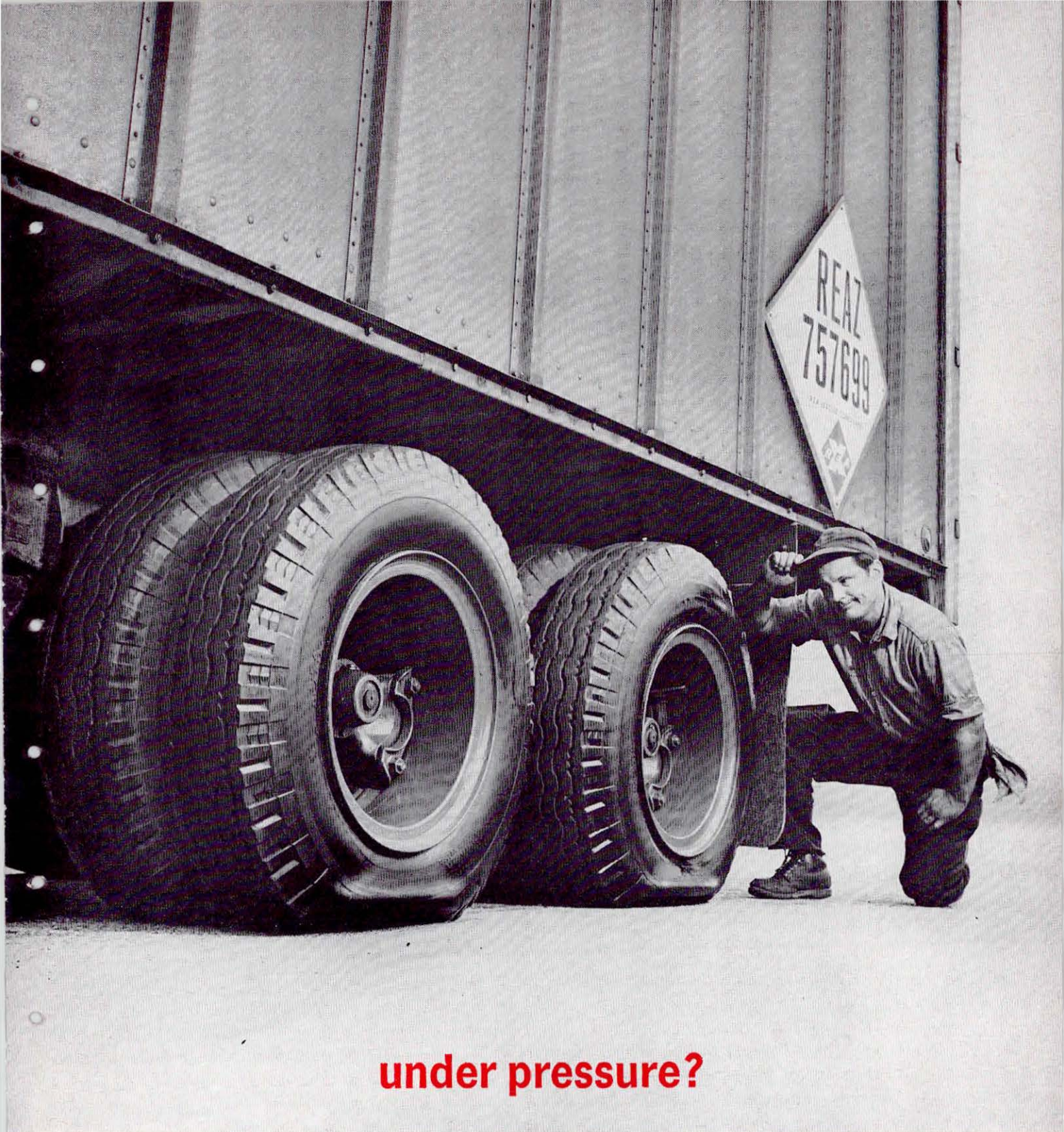

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Call REALCO.

Because REALCO takes care of *all* tire repair, replacement, and maintenance on trailers it provides to members of its National Railroad Trailer Pool. (This feature is a REALCO exclusive, by the way!)

And a REALCO trailer never gets very far from a maintenance source. There are 116 fully-equipped R E A Express garages and maintenance stations across the country—all on constant stand-by service. Plus a fleet of mobile service units in strategic locations for on-the-spot work.

In case of tire trouble, one phone call to REALCO will put this service system into *immediate* operation to get the trailer on its way again.

As for the rest of the trailer: *all* REALCO trailers are supplied to member railroads on a *fully* maintained basis—with all licensing, general servicing and repair, and damage in excess of $100 completely taken care of. (Another REALCO exclusive!)

And there are many more advantages. For all the facts—plus actual figures on the basic economy of using REALCO trailers—write to Palmer Bayer, Vice President and General Manager, R E A Leasing Corporation, 219 East 42nd Street, New York 17, N. Y.

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Special high-sided open-top trailers, well suited for loading tall or irregular shaped objects and for regular dry-van shipments. Equipped with tarpaulin.

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Special insulated all-weather trailers are Chessie's answer for dry-van products that need protection against critical temperature changes while in transit.

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"Special" is the word for Chessie Piggyback

New C&O trailers geared specifically to your requirements are just one of the special features of Chessie Piggyback. Another is the unique Lake Michigan Trainferry Route where trailers take the year-round short cut to markets east or west. Special, too, is C&O's electronic Car Location Information Center, able to report to you with prompt accuracy on your shipment.

Chessie's Piggyback is modern, imaginative, versatile. It's a weatherproof steel expressway through the industrial heart of America. It's cross-country, providing 145 ready connections with other railroads.

Very special is the service and attitude of your resourceful C&O representative. Call him or get in touch with J. H. Suthann, Manager, C&O Piggyback Services.

The Chessie Route

Chesapeake and Ohio Railway

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World's Biggest Box Car

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Wood Chip Car—6800 cu. ft. cap.

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▪ SCULLIN STEEL'S TRUCK CASTINGS ▪

With the aim of reducing transportation costs and increasing efficiency, The Southern Railway designed and built these and other ultra-modern, high capacity freight cars—each "custom tailored" to individual shippers' needs. Here are some examples of Southern's "imagination on wheels" recently sent on a system-wide tour.

Scullin Steel is proud to have contributed to this modern railroad technology by aiding in the design and development of the Scullin high tensile Truck Castings with which many of these cars are equipped.

For more than 60 years, Scullin has played an important part in the advancement of freight car transportation. Whatever **your** requirements for Truck Side Frames and Bolsters, Coupler Yokes and Draft Sill Castings—specify Scullin—and be sure of the finest.

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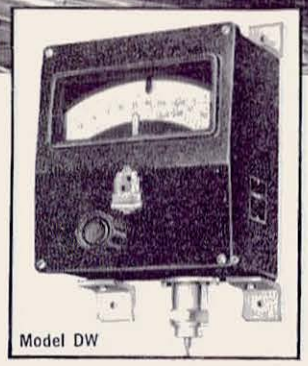


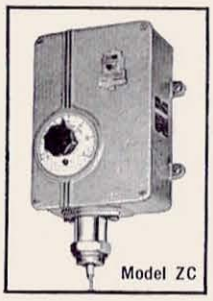
PARTLOW outnumbers all other temperature controls in reefers and piggy-backs

Riding the rails and keeping tabs on temperatures is a routine job for Partlow Controls. They outnumber all other controls because they *outperform* them.

Partlow designs controls specifically for reefer and piggy-back applications . . . the Model DW, for example.

This is a weather-resistant indicating control, primarily for outdoor installations such as control of reefers or trailers where a variety of refrigeration and heating stages is necessary.

Another is Model ZC, a non-indicating control equipped with two to five switches, making it possible to set up any combination of up to six functions to operate in sequence on rise or fall of temperature.



Mercury-actuated, ruggedly-built, Partlow Controls are uncomplicated mechanical instruments that withstand every road shock and vibration.

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A RAILROAD BOOK YOU MUST READ

QUEST FOR CRISIS

by James Sites

The author, on an Eisenhower Exchange Fellowship, has visited 25 nations to bring you an eye-opening account of what's happening in railroading and transport the world over . . .

While cities cry for fast, efficient urban transit service . . . railroad service dwindles!

While air travelers find airways more and more dangerously overcrowded . . . fewer trains run between American cities carrying ever-fewer passengers!

While more tax dollars than ever before are doled out for transport subsidies . . . some common carriers are going broke, others nearing financial collapse!

What's wrong? Why does America bog down a little deeper every day in this colossal transportation muddle?

In a year-long search for causes and clues to the possible solution of the problem, the author traveled from Europe through the Middle East to India and Russia. He talked with officials of all forms of transportation, with ticket clerks and Transport Ministers . . .

A London professor of transportation: "You Americans appear not only to be undermining a great industry but to be throwing away a great national asset."

In Belgrade: "Communists consider the deterioration of transportation in capitalist countries a sure sign of the coming collapse of the West."

A bewildered Swiss official: ". . . what are you Americans trying to do to your railroads? Is your government out to destroy them?

AND THESE SHOCKING DEVELOPMENTS —

In BRITAIN — "muddling through" on public policies stirs up transport turmoil, turns British railways into an economic and physical monstrosity. In NORTHERN IRELAND — officials admit that for special reasons, it's a matter of time before railroading is abandoned entirely. In SWITZERLAND — Sound government policy, good management, make money and friends for Swiss railroads. In ITALY — overload of politics in transportation produces bulging losses. In the U. S. S. R. — super-railroads in the making to handle titanic traffic loads. In SPAIN — new track construction nobody uses. In BELGIUM — public taken for a "free" ride. In GREECE — railroads run up biggest deficits in Europe. In FRANCE — SNCF streamlines equipment, turns to daring price innovations. In GERMANY — equal government treatment for all carriers becomes the byword. In the MIDEAST — transport runs wild, the public pays the bill.

CONCLUSIONS? Is there a way out? Yes! For clues to this future, read QUEST FOR CRISIS!

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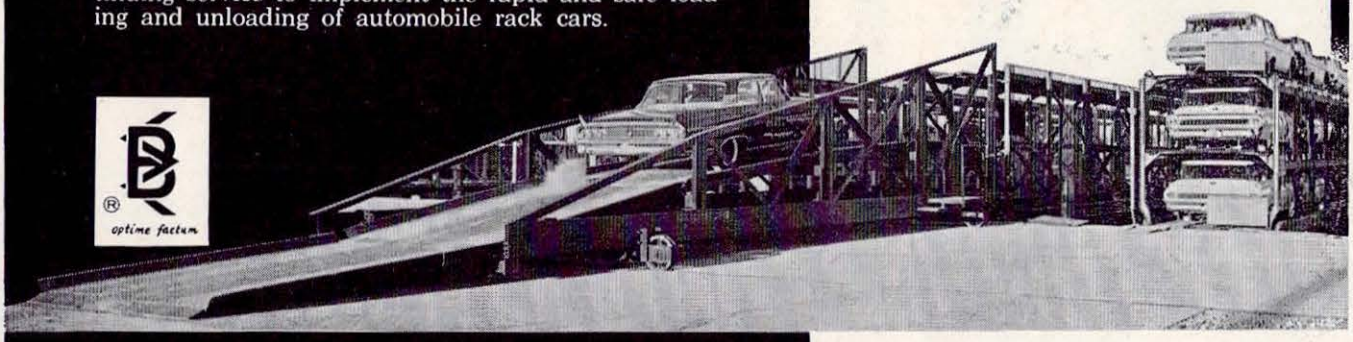

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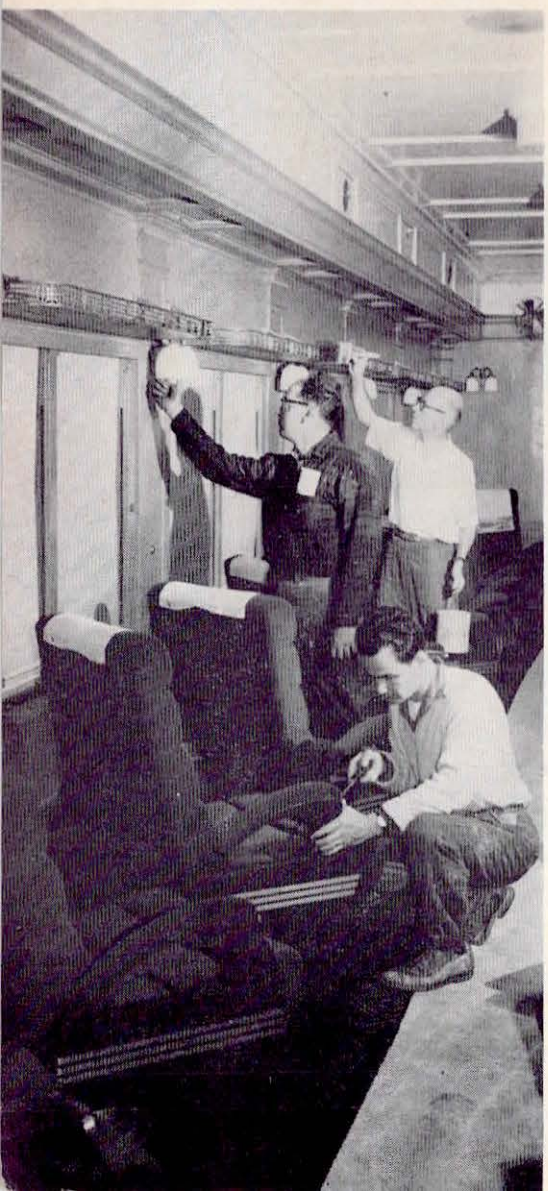
DINING CAR "Tuscarora" is well-stocked for its weekend trips (above). Parlor cars are fresh from LIRR shops.

COMFORT, class and conviviality are easy to come by on the weekend specials.



'Weekend Chiefs' Go First Class on LIRR

Weekdays, it's "The Route of the Dashing Commuter"—but on weekends, the Long Island transforms itself into "The Route of the Weekend Chief."

Long Island has been pushing a "renaissance of deluxe travel" for weekend vacationers for several summers—and this year the service is bursting forth in full bloom:

- Weekend specials started running a month earlier and will be operated a month longer than before.
- Addition of a second open-platform observation car gives the "weekend chiefs" the only two such cars operating in regularly scheduled service in the country.
- Resort trains are now named, "to simplify reservations and add that final touch of prestige." Names, LIRR notes, have a certain symbolism—cheery on the outbound run ("Advance Cannon Ball," "Weekender") and just a bit wistful on the inbound run at the close of the weekend ("Ebb Tide," "Twilighter").
- Long Island shopped its own fleet of parlor cars for extensive redecoration during the winter—and then leased an extra 10 cars to augment its roster of 29 parlor cars, two observations and a dining car.

Has the extra effort and the promotion paid off? It has. Business, says LIRR Vice President James A. Schultz, "has grown to the point where the railroad can't find enough cars to meet the demand for reservations on a few of the busier summer weekends." During July and August this year, Long Island expects to have to split at least its "Weekender" into two sections. And, beginning June 27, two of the outbound specials will be operated Thursdays as well as Fridays —for those whose "weekends" stretch to an extra day.

RAILROADING AFTER HOURS WITH JIM LYNE

LYNE

WHERE TO SELECT OFFICERS—On the question (RA, June 3, p. 24) of "trainees" for officers' positions, and where to pick them (among college boys, from fellows in the ranks—or both), IC's Public Relations Officer Cliff Massoth has sent me a page from the current IC Magazine, telling of three young men selected from the ranks as operating department trainees. One is an agent-yardmaster, another a master mechanic's secretary, and the third a diesel supervisor. The training program is a full-time assignment for two years.

"More college-trained men are needed in railroad management," in Cliff's opinion. "On the other hand, it would be unwise to close the door to qualified young men in the ranks." I agree 100%.

I can't get out of my mind what a prof at one of these university management training programs once told me—that is, when they get officers in their program who have been in responsible jobs for several years—it's practically impossible to tell the college graduates from those without academic preparation.

GEOLOGY FOR RAIL TRAVELERS—James Sloss of the Transportation Center at Northwestern University tells me he has a 3-volume publication, put out by Canada's Geological Survey in 1913, describing the geology to be seen along the CP and the Canadian Northern (now Canadian National), between Toronto and Victoria. The U.S. Geological Survey had a 5-volume "Guide Book of the Western States" published about the same time.

The trouble with these geological survey people is (or so it seems to me) that they let their most interesting publications get out of print mighty soon—so the only place you can hope to lay hands on them is from a secondhand dealer, often at a fancy premium.

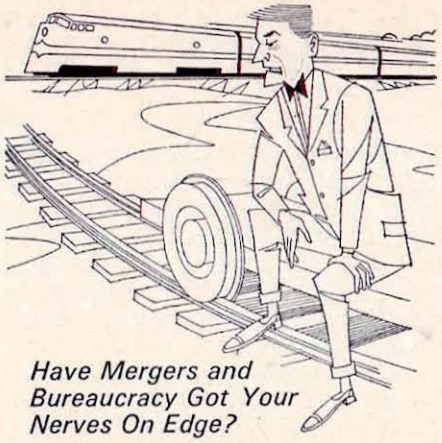
STILWELL'S DREAM—One of my editorial colleagues, Luther Miller, is fresh back from Mexico—where, among a lot of interesting railroading he saw, he had a good look at the fabulous Chihuahua al Pacifico Railway. In fact, he liked what he saw so much that he took two round-trips over the line. The magnificent mountain train travel that he described I can hardly believe—except that he has pictures to prove it. This railway, he reports, is so far lightly patronized—obviously because word hasn't yet got around very widely as to what non-visitors are missing.

This Chihuahua al Pacifico is, of course, the west end of the Kansas City, Mexico & Orient—some sections of which were built by railroad builder A. E. Stilwell, back before World War I. Terminating at Topolobampo on the Gulf of California, the KCM&O was to have been Stilwell's answer to a short rail-ocean route to the Far East. Well, at long last, the rail route is in operation. Like some others, it could accommodate (and deserves) more traffic than has so far come its way.

ARE YOU A 'FERROEQUINOLOGIST?'—This word is the highbrow term for "a lover of the iron horse"—in short, a fan. My authority is an excellent 6-bit paperback, entitled "The Story of English," by Professor Mario Pei of Columbia University. It is a popular but comprehensive report on the development of our crazy-quilt language—made up of borrowings from practically all other languages.

Professor Pei, though, can't be much of a ferroequinologist himself—else he would know better than to tell us that a locomotive fireman is known as a "tarpot"—whereas "tallowpot" is the word (for which the explanation is no longer appropriate).

'BAND-WAGON' TRENDS—REA's President Bill Johnson, a couple of weeks ago, emphasized to the railway advertising managers the importance of the "band-wagon" as a traffic builder. You get some additional business as a result of better rates and service—but you get a far larger increase after the word gets around that you've done this improving. Giving you business then becomes a case of "everybody's doing it." As the saying has it: Nothing succeeds like success—which is true unless you get complacent about it, at which point the band-wagon may reverse its direction.



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Tomorrow's Trains: Industrial Evolution

Railroads will be forced to develop high-speed, medium-distance transportation to compensate for the loss of long-haul traffic which will come with the decline of cities as industrial centers, a sociologist told a study group at the Transportation Center of Northwestern University.

W. F. Cottrell, chairman of the department of anthropology at Miami University, Oxford, Ohio, said that transportation improvements will make it less necessary to concentrate population in the cities, spurring regionalization. And increased regionalization, with new technology, will mean that less long-range hauling will be done, he added.

"Railroads and cross-country truckers will be the losers as more and more processing is done within regional boundaries, increasing the self-sufficiency of the regions," Mr. Cottrell predicted.

High speed railroads operating over medium distances will be the answer to regionalization, he told the study group, adding that there also is a role for railroads in medium-distance passenger transportation: "Today a citizen of Baltimore may spend one or two hours getting to the new Dulles airport in Virginia, another 45 minutes in flight to Idlewild, and a final hour to Manhattan. A super-speed railroad, like the ones being built in Japan, could cover the same distance in less time and at less cost."

Before the improvements which will cause regionalization can be made, major changes will have to be made in the regulation of transportation, according to Victor Roenblum, director of Northwestern's program in law.

"The opportunity to innovate," said Mr. Rosenblum, "has been largely stultified by regulation."

He suggested that Interstate Commerce Commission members be selected from a list of names submitted by professional associations and that restrictions against intermodal transport ownership be removed.

These changes, he said, would give transportation people the opportunity to deal with transport problems "in their totality." Without that opportunity, "the people in a transport mode that has the operating know-how, but is being made technologically obsolete, can do nothing but see it and themselves die."

Mr. Rosenblum urged that regulatory commissions also take an overall view of transportation, stating there is little or no coordination between the ICC, CAB, and the Maritime Commission.

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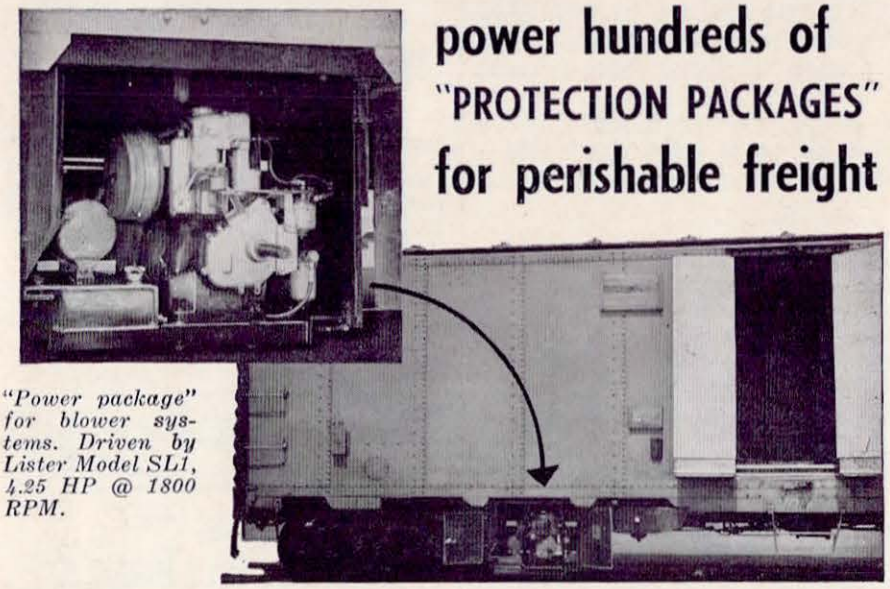
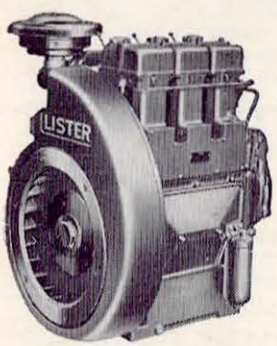
power hundreds of "PROTECTION PACKAGES" for perishable freight



"Power package" for blower systems. Driven by Lister Model SL1, 4.25 HP @ 1800 RPM.



Power-plus for mechanical refrigeration systems. Lister Model HA3, 33 HP @ 1800 RPM.

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ALLEGHENY & WESTERN.—6% guaranteed, $3, semiannual, payable July 1 to holders of record June 14.

ATCHISON, TOPEKA & SANTA FE.—Preferred, 25¢, semiannual, payable Aug. 1 to holders of record June 28.

CANADIAN PACIFIC.—75¢, semiannual, payable Aug. 1 to holders of record June 21.

MAHONING COAL.—Common, $12.50; Preferred, $1.55, semiannual, both payable July 1 to holders of record June 24.

NEW YORK, CHICAGO & ST. LOUIS.—50¢ quarterly, payable July 1 to holders of record May 31.

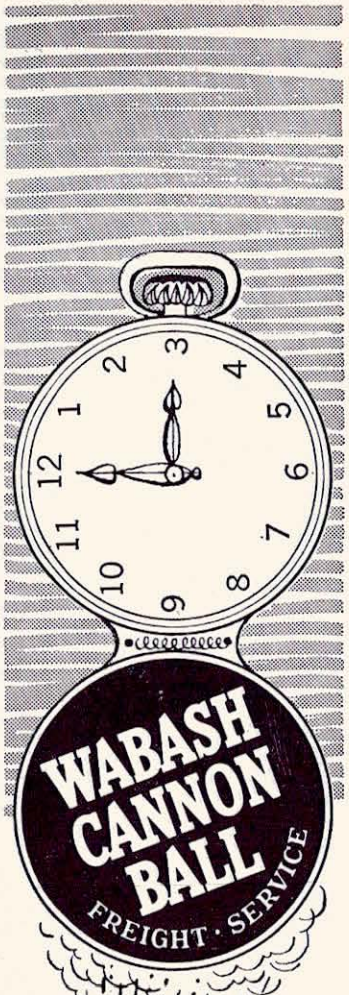
NORTHERN CENTRAL.—$2, semiannual, payable July 15 to holders of record June 28.

PITTSBURGH, FORT WAYNE & CHICAGO.—Preferred, $1.75, quarterly, payable July 2 to holders of record June 10.

PITTSBURGH & LAKE ERIE.—$1.50, quarterly, payable July 15 to holders of record June 28.

ST. LOUIS-SAN FRANCISCO.—25¢, quarterly, payable Sept. 17 to holders of record Sept. 3.

WESTERN MARYLAND.—Preferred, 40¢ quarterly; common, 25¢, quarterly, both payable June 28 to holders of record June 18.



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Current Publications

GREAT TRAINS OF ALL TIME, by Freeman Hubbard. 156 pages, illustrations. Grosset á Dunlap, 1107 Broadway, New York 10. $4.95.

Covers some American and world-famous trains as well as trains for special jobs. Included are the Sunset Limited, Panama Limited and Super Chief; the Mistral, the world's fastest train; the Trans-Siberian Express; presidental funeral trains; famous excursion trains; and the world's best loved train, the pay train.

P G E (Pacific Great Eastern) RAILWAY TO THE NORTH, by Bruce Ramsey. 265 pages, illustrations, map. Mitchell Press, Vancouver, Can. $7.50.

PULLMAN IN EUROPE, by George Behrend. 360 pages, illustrations: Ian Allan Ltd., Craven House, Hampton Court, Surrey, England. 42 shillings.

REPRINT OF RECORD OF RECENT CONSTRUCTION NO. 56—THE ATCHISON, TOPEKA & SANTA FE RAILWAY SYSTEM ISSUED BY BALDWIN LOCOMOTIVE WORKS, PHILADELPHIA, PA., 1960. Reprinted by Harry P. Albrecht, 40 Wilton Ave., Clifton Heights, Pa. $2.

THE ECONOMICS OF LOYALTY-INCENTIVE RATES IN THE RAILROAD INDUSTRY OF THE UNITED STATES, by Robert F. Lundy. 144 pages. Bureau of Economic and Business Research, Washington State University, Pullman, Wash. $6.

THE GIANT'S LADDER; DAVID H. MOFFAT AND HIS RAILROAD, by Harold A. Boner. 224 pages, illustrations, maps. Kalmbach Publishing Co., Milwaukee 3, Wis. $12.

THE LAST STEAM LOCOMOTIVES OF WESTERN EUROPE, by P. Ransome-Wallis. 179 pages, illustrations. Ian Allan Organization, Craven House, Hampton Court, Surrey, England. 50 shillings.

TRANSPORTATION: ECONOMICS AND PUBLIC POLICY, by Dudley F. Pegrum. 625 pages, maps. Richard D. Irwin, Inc., Homewood, Ill. $11.35.

BULLETIN NO. 108. 81 pages, illustrations, maps, drawings. The Railway & Locomotive Historical Society, Inc., Baker Library, Harvard Business School, Boston, Mass. $2 to members; $3 to non-members.

METROPOLITAN TRANSPORTATION-1980; A Framework for the Long-Range Planning of Transportation Facilities to Serve the New York-New Jersey Metropolitan Region. 380 pages, tables, charts, maps. Comprehensive Planning Office, The Port of New York Authority, 111 Eighth Ave., New York 11. $5.95.

NEW YORK HANDBOOK, 1963. The Story of the New Jersey-New York Port of Tomorrow, edited by John Wieting. 224 pages, illustrations. The Port Resources Information Committee, Inc., One Broadway, New York 4. $2.50.

THE STORY OF LONDON'S UNDERGROUND, by John R. Day. 153 pages, illustrations, maps, drawings. London Transport, Publicity Officer, Griffith House, 280 Marylebone Road, N.W.1, London. 5s.

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PEOPLE IN THE NEWS

AKRON, CANTON & YOUNGSTOWN.—**H. L. Bullock,** superintendent motive power and cars, Akron, Ohio, appointed assistant general superintendent and his former position abolished.

ASHLEY, DREW & NORTHERN.—**E. A. Temple,** vice president (operations), Crossett, Ark., named executive vice president and general manager.

ASSOCIATION OF AMERICAN RAILROADS.—**Edmund Burke,** general freight claim agent, **Southern Pacific,** San Francisco, was elected chairman, Freight Claim Division, Association of American Railroads, at the organization's annual meeting in Minneapolis. Mr. Burke succeeds **V. A. Leengran,** general freight claim agent, **Chicago, Burlington & Quincy,** Chicago.

ATLANTIC COAST LINE.—**C. W. Morton, Jr.,** appointed general agent, Orlando, Fla.

BALTIMORE & OHIO.—**Stephen F. Taylor,** district sales manager for perishable products and livestock, Philadelphia, appointed regional sales manager, Trailer Service Department, at that point. **LeRoy M. Quigley,** sales representative, Philadelphia region, succeeds Mr. Taylor.

BURLINGTON.—**Richard E. Altgilbers,** freight rate investigator, appointed assistant general freight agent, Fort Worth, Tex., succeeding **Carrol G. Mathews,** resigned.

CANADIAN NATIONAL.—**A. Ray Williams,** assistant manager, Winnipeg Area, appointed special assistant to vice president of sales, Montreal. **R. W. Bowman,** acting trainmaster, Port Arthur, Ont., promoted to trainmaster, Prince Albert, Sask., succeeding **M. A. Dempsey,** transferred to the Assiniboine Area at Winnipeg.

J. J. Harris, special assistant—car, Toronto, Ont., appointed assistant general superintendent equipment, Great Lakes region, Toronto, succeeding **G. L. Galloway,** retired.

CHESAPEAKE & OHIO.—**Jay R. Angle** appointed assistant to director of traffic research and planning, Cleveland. **Roy G. Kidwell** named staff assistant, office of Director of traffic research and planning, Cleveland.

W. Russell Johnson and **Robert L. Stender** appointed district managers—piggyback services at Richmond, Va., and Cincinnati, Ohio, respectively.

H. P. Thompson appointed safety and fire prevention instructor—system, Huntington, W. Va., succeeding **W. E. Rounsavell,** appointed supervisor of safety and fire prevention, Newport News, Va., succeeding **W. M. McPherson,** retired.

R. N. Hampton, financial analyst, appointed assistant to treasurer.

J. J. Dwyer, chief chemist—system, appointed chemical engineer for both C&O and **Baltimore & Ohio,** at Huntington, W. Va.

R. S. Radspinner appointed superintendent work equipment and reclamation—system, Barboursville, W. Va., succeeding **R. K. Johnson,** retired. **Howard Barker** appointed supervisor work equipment. Clifton Forge, Va., succeeding **W. A. Hutcheson,** retired.

Paul T. Brown appointed assistant supervisor signals, Huntington, succeeding **W. M. Dunn,** retired. **J. B. Small** promoted to assistant supervisor signals, Columbus, Ohio succeeding **V. C. Wales,** retired.

CHESAPEAKE & OHIO—BALTIMORE & OHIO.—**K. T. Reed,** general manager, motive power and equipment of these roads at Huntington, W. Va., will maintain headquarters in the B&O Building, 2 North Charles Street, Baltimore, Md., effective June 1.

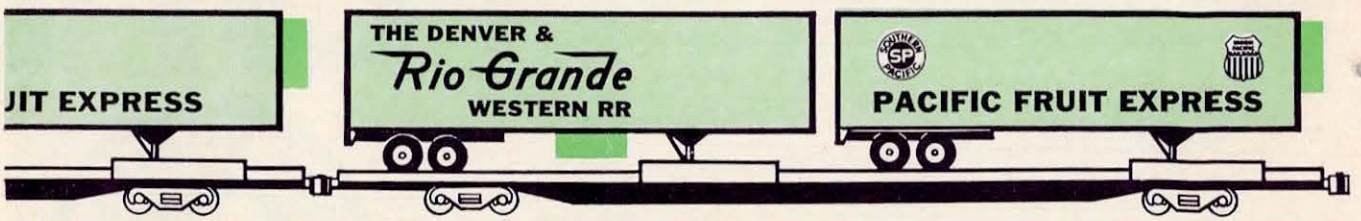
CHICAGO GREAT WESTERN.—**V. A. Vaughn** appointed assistant manager piggyback operations, Oelwein, Iowa.

COTTON BELT.—**Joe B. Carter,** general agent, Philadelphia, Pa., appointed eastern traffic manager, 331 Madison Avenue, New York, succeeding **E. P. Becker,** who retires June 30 after over 46 years' service. **Lyle E. Wikenhauser** succeeds Mr. Carter at Philadelphia.

DELAWARE & HUDSON.—**John P. Hiltz, Jr.,** president and general manager, Albany, N.Y., has been designated chief executive officer effective June 18, coincident with the relinquishment of that responsibility by **William White,** chairman of the board, who becomes also chairman of the board and chief executive officer, **Erie-Lackawanna.** Mr. Hiltz will maintain his offices in Albany and will, on Sept. 1, discontinue the New York offices and move the personnel to Albany.

ERIE-LACKAWANNA.—Has announced three new sales positions to strengthen piggyback service to shippers. They include **Earl C. Adler,** regional sales manager, and **George R. Marr,** assistant regional sales manager, both in New York, and **W. Seal Burwell,** regional sales manager, Chicago. Mr. Adler was previously assistant freight traffic manager for piggyback, forwarder and less-than-carload freight. Mr. Marr was district sales manager for piggyback, forwarder and LCL freight in New York. Mr. Burwell was assistant district sales manager, Pittsburgh.

TRANSICOLD DIESELS ARE THE NATION'S MOST



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Now railroads who want the economy, the performance, the dependability of the Transicold Diesel can have it — underslung or "On the Nose."

For more information, write today for our illustrated Transicold Diesel Line brochure.

Paul Knapp, Jr., appointed assistant to director of piggyback, Cleveland.

Michael H. Rozelsky, Jr., appointed special study assistant, Cleveland.

Donald D. Purdy, supervisor wage bureau, Cleveland, retired May 31 and that position abolished. **Raymond B. Connell** appointed supervisor labor relations, Cleveland. **Frank C. White** named assistant examiner, labor relations, Cleveland.

KANSAS CITY SOUTHERN.—J. A. Dorvitt, manager—mail, baggage and express traffic, Shreveport, La., retires June 30 after more than 49 years of continuous service with the KCS.

LOUISVILLE & NASHVILLE.—Eugene V. Fitzpatrick, general agent, Philadelphia, named division freight agent, New Orleans, succeeding **J. Emmett Power**, retired. Mr. Fitzpatrick's successor is **Eugene J. Blaes**, traveling freight agent, Milwaukee, Wis. **Frank J. Bantle**, general western freight agent, San Francisco, appointed division freight agent, St. Louis, to replace the late **Robert S. McAfee.**

William A. Summers, assistant auditor of disbursements, Louisville, retired May 3.

Julian L. James, manager, advertising and publications, and editor of the L&N Magazine, retired. **Norman F. Hurt**, public relations representative, has assumed responsibility for advertising and promotion. **Kincaid A. Herr**, associate editor of the company magazine, replaces Mr. James as editor.

James I. Adams named general superintendent of communications and signals, Louisville, Ky.

Dick C. Brown, assistant auditor, **Clinchfield**, Erwin, Tenn., named assistant to comptroller, L&N, Louisville. **W. R. Swift** named auditor of capital expenditures, to replace the late **C. J. Burckel. Herbert L. Rhoads** appointed to the newly created post of joint facility accountant. **Harold L. Snyder** appointed senior cost analyst and **F. D. Reed** named cost analyst. Mr. Snyder was formerly associated with Transportation Subsidiaries of U.S. Steel Corp. and Mr. Reed was associated with the **Birmingham Southern.**

MINNESOTA RR & WAREHOUSE COMMISSION.—Ronald L. Anderson, commissioner, elected chairman, St. Paul, Minn., succeeding **Paul A. Rasmussen**, who will serve as principle ICC joint board member. **Hjalmar Petersen** continues as vice chairman.

MISSOURI PACIFIC.—J. A. Austin and **D. W. Schwarz** named trainmasters, Beaumont and San Antonio, Tex., respectively.

George J. Schmidt, district sales manager, New York, appointed assistant traffic manager, Western Region, Denver, Colo., effective July 1.

PENNSYLVANIA.—Richard S. Bergey, auditor, freight revenues, Philadelphia, appointed manager, revenue accounting. **J. R. Dixon**, auditor, passenger revenues, named assistant manager, revenue accounting. **C. R. Kirk**, assistant auditor, freight revenues, appointed assistant manager, revenue accounting.

ROCK ISLAND.—Robert H. Bright, labor relations officer, Chicago, appointed director of personnel there, succeeding **Fred J. Meyer**, named director of sales training and management development (RA, June 17, p. 47). **Jack C. Gilkerson** named labor relations officer (general), and **Leslie E. Sheldon** appointed labor relations officer (non-operating crafts), both at Chicago.

SANTA FE.—F. A. Beauchamp, Jr., named acting superintendent, Chicago Terminal division, Corwith, Ill., to replace **F. L. Elterman**, superintendent, on leave of absence.

WABASH.—L. H. Willson, district sales manager, Seattle, appointed to the newly created position of assistant traffic manager, Chicago. His successor is **R. H. Keever**, sales representative, Seattle.

WESTERN MARYLAND.—Roland C. Hampe appointed assistant general freight agent, Baltimore. **Frank C. Scheidt** named manager tariff bureau.

Supply Trade

Richard W. Geaney has been named manager, Railroad Products Department, **Servo Corp. of America**, Hicksville, N.Y., succeeding **W. P. Morrison.** Mr. Geaney was formerly sales manager, Railroad Products.

W. Irving Osborne, Jr., president, **Pullman Incorporated**, Chicago, has been designated chief executive officer, succeeding **Champ Carry**, who continues as chairman of the board.

Edward S. Weil has been appointed sales manager, Rectifier-Capacitor division, **Fansteel Metallurgical Corp.**, North Chicago, Ill., succeeding **Glen Iaggi**, resigned. Mr. Weil was formerly Midwest regional sales manager for the division.

Donald Lade has been appointed sales manager, Western Region, **Baldwin-Lima-Hamilton Corp.**, Los Angeles. **John F. Kirkland** named manager, Western district, Western Region, San Francisco. **Joseph Hagen** named manager, Southwestern District, Western Region, Los Angeles.

Andrew Lamberson has been appointed railroad sales engineer, **Colorado Fuel & Iron Corp.**, Denver. He was formerly product supervisor, Quality Control Department, Pueblo Plant.

William D. Steadman, president, **Steadman Industries Ltd.**, resigned. Company officers are **Gabriel Alter**, president; **David R. Crowden**, general manager; **A. M. Hand**, chief engineer; **Charles Cowley**, comptroller.

Frank C. Underwood, general transportation manager, **Merchants Despatch Transportation Corp.**, Chicago, has been appointed vice president — operations, succeeding **J. C. Patrick. Horace M. Kamm**, assistant to vice president—operations, succeeds Mr. Underwood as general transportation manager.

R. L. Dame has been appointed to the newly created position of director, Research and Development, **XTRA, Inc.**, Boston, Mass. Mr. Dame was formerly eastern manager, New York office, and is succeeded in that post by **W. J. Gestal**, assistant eastern manager. **Joseph Griffin** was transferred from Boston to New York to assume the post of assistant eastern manager. **F. O. Blanchard** was named equipment manager, Boston.

Franklin L. Mettler, assistant controller, **Pullman-Standard** division of **Pullman Incorporated**, has been appointed comptroller, to succeed **O. J. Engle**, vice president and comptroller, retired.

Rembrandt P. Lane, Jr., has been elected vice president—finance, **North American Car Corp.** He was formerly vice president—finance and treasurer, Northeast Airlines.

William W. Taggart, formerly associated with Pan American Engineering Co. of Dallas, has established his own organization to be known as **Wm. W. Taggart, Railway & Industrial Equipment**, 5518 Dyer Street, Dallas 6, Texas.

Truce C. Zimmerman, division manager, **Oakite Products, Inc.**, Dallas, Tex., transferred to the Midwestern division at Kansas City, Mo., succeeding **Frank C. Weber**, retired. **Griffin Tatum**, of Montgomery, Ala., succeeds Mr. Zimmerman.

Miles A. Todd, field engineer and salesman

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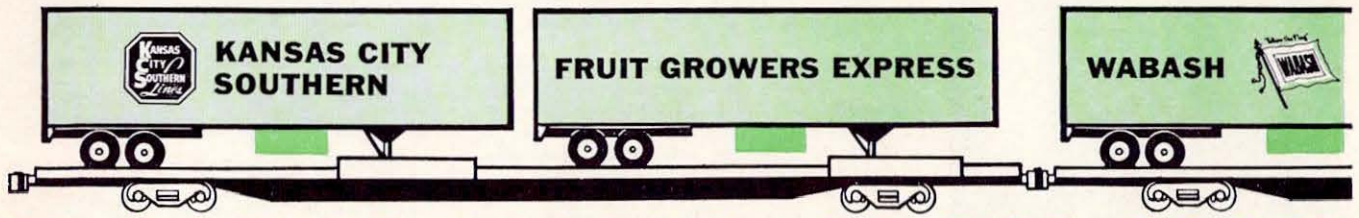

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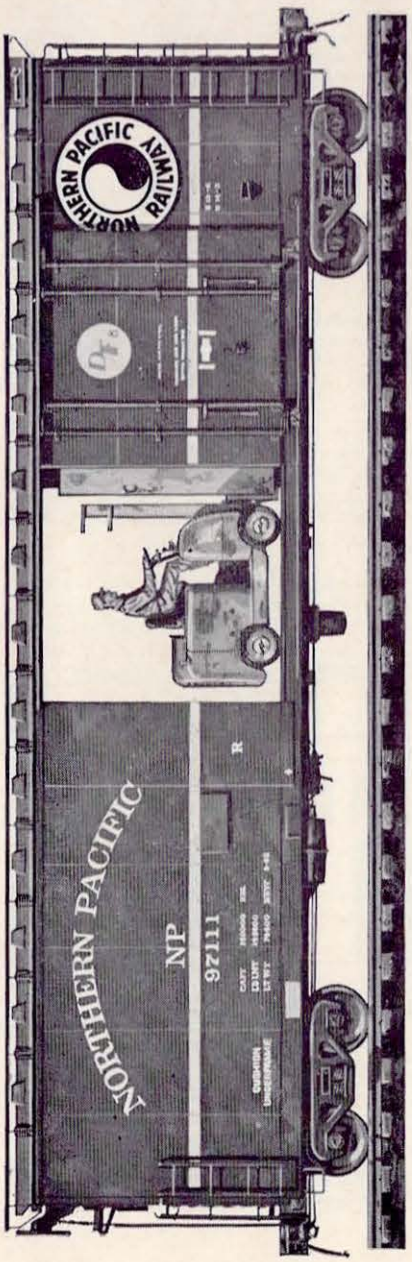

for **Gould-National Batteries' Industrial Battery Division,** in the St. Paul district, has been appointed assistant manager of field engineering, at St. Paul. **Richard Sorlie** appointed field engineer and **George L. Berglin** named specification engineer.

A. W. Frank, Eastern Regional Manager, Primary Battery Division, Thomas A. Edison Industries of **McGraw-Edison Co.,** has been appointed to the newly created position of manager of sales engineering. **W. E. Rowland,** field engineer, named eastern regional manager. **H. E. Woodhouse,** former signal engineer, **New York, Susquehanna & Western,** appointed field engineer, Bloomfield, N.J.

Freightmaster, a division of **Halliburton Co.,** has moved to larger quarters at 424 West Vickery Blvd., Fort Worth 1, Tex. (P.O. Box 2325).

Strick Trailers, division of Fruehauf Corp., has announced the formation of a new division, known as RENTCO, for the rental of transportation equipment. **Bill Sennett** has been appointed general manager, Los Angeles, Calif. Branch offices and facilities are operating in Chicago, Charlotte, N.C., New York, and Fairless Hills, Pa. Rentco will make available railcars, containers, bogies and trailers to both shippers and carriers on a short term, low cost rental basis.

William M. Carney, Jr., has been appointed director of advertising and public relations for **Haveg Industries, Inc.** Mr. Carney will retain his post as sales manager, Container division.

Dennis O. Butterfield will represent **Oakite Products** in the Columbus, Ga. area.

Andrew C. Lamberson has been named railroad sales engineer, **Colorado Fuel & Iron Corp.,** Denver.

American Brake Shoe Co. and **Shin-Mitsubishi Heavy Industries, Ltd.,** in a joint venture, have established a Japanese company licensed to manufacture and sell various hydraulic products developed in the United States by Brake Shoe's Denison Engineering division. **Leroy E. Bonnette,** formerly with that division, has been named president of the new company, known as **Nihon Denison Hydraulics** Kabushiki Kaisha (Denison Hydraulics, Japan, Ltd.), at Tokyo. Shin-Mitsubishi will name a vice president and become the manufacturing supplier for the new company. Sales will be handled by Denison Hydraulics, Japan, Ltd., and Mitsubishi Shoji Kaisha, Ltd.

N. R. Farsje, vice president—director of automotive and general sales, **Gould-National Batteries,** has been elected vice president—director of sales for the corporation. **George P. Millington, Jr.,** general sales manager, Industrial Battery Division, has been elected vice president—sales of that division, replacing **J. R. Tench,** who resigned May 14. **H. N. Stover** is the administrative director of the Industrial Battery Sales division and will serve as a member of that division's executive sales committee, along with Mr. Farsje and Mr. Millington.

Walter J. Ryzner has been promoted to district representative, Midwest district, Transportation division, **Nalco Chemical Co.,** at Chicago. Mr. Ryzner has been with Nalco's Research laboratory specializing in water treatment.

Berman Leasing Co. has acquired the terminal and 118 unit truck fleet of Pan American Leasing Co. in Hato Rey, Puerto Rico.

John H. Hauser joined **Koppers Co.** on June 1 as vice president and manager of marketing, Tar Products Division, in charge of sales, new product development, market planning and development, and advertising. Mr. Hauser was formerly manager of distribution development for Raytheon Co.

Industrial Traffic

John V. Waters, traffic manager, Special Products Division, **National Biscuit Co.,** New York, has been named director of distribution and traffic. **John C. Maass,** distribution manager, has been named assistant director of distribution and traffic. **Frederick C. Hunter,** traffic coordinator, has been named staff assistant to director of distribution and traffic.

G. E. Cook, tidewater agent, **Eastern Associated Coal Corp.,** who coordinated shipment of all railroad coal in the territory of the New York sales office, retired May 31.

Erving Daniels, refinery manager, **American Bitumuls & Asphalt Co.,** Cincinnati, has been appointed manager, supply and distribution, Eastern division, Baltimore, Md.

OBITUARY

Horatio W. MacArthur, retired general traffic manager, **Air Reduction Sales Co.,** died June 10 at Clearwater, Fla.

John J. McGarry, 52, freight traffic manager, Lines West, **Burlington,** Omaha, Neb., died June 8 in that city.

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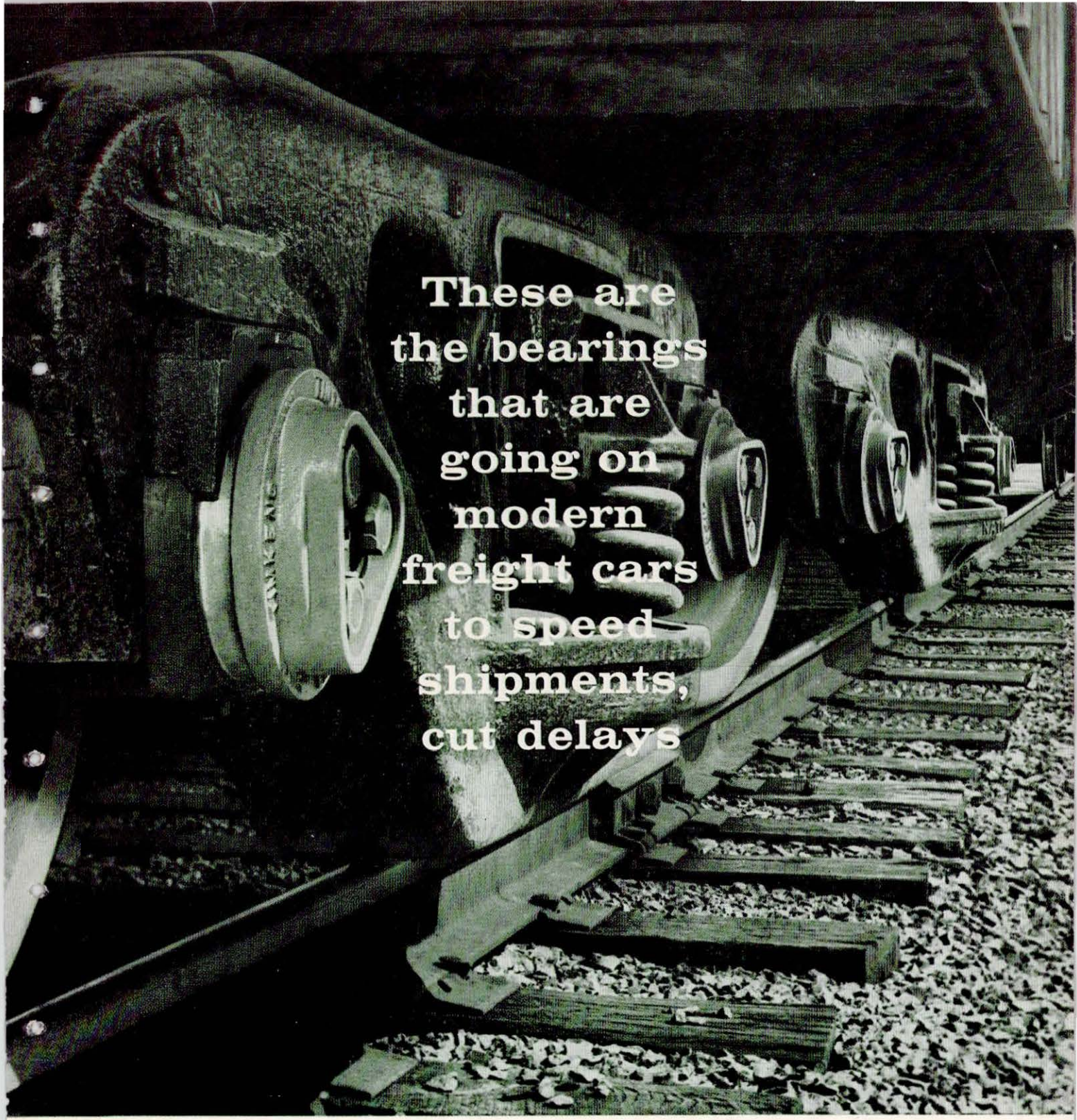
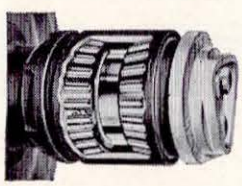


Over 116,000 freight cars in America are now rolling, or soon will be, on Timken® tapered roller bearings. 120 railroads and private car owners are finding Timken bearings the most economical way to speed goods to customers in their modern, efficient cars.

With Timken "AP" heavy-duty bearings on the axles, railroads are solving the hot box problem—the number one cause of freight train delays. Evidence of this performance is the fact that Timken bearings are averaging over one-hundred million car-miles between set-outs due to overheated bearings.

An interesting statistic: In 1962, three-out-of-four of all new freight cars built or ordered went on roller bearings, and Timken bearings led the way. They roll all the loads, give freight a fast, smooth ride with easy starts and stops. The high-speed, high-mileage railroading of today demands them. The Timken Roller Bearing Company, Canton 6, Ohio. Manufacturers of Tapered Roller Bearings, Fine Alloy Steel and Removable Rock Bits.



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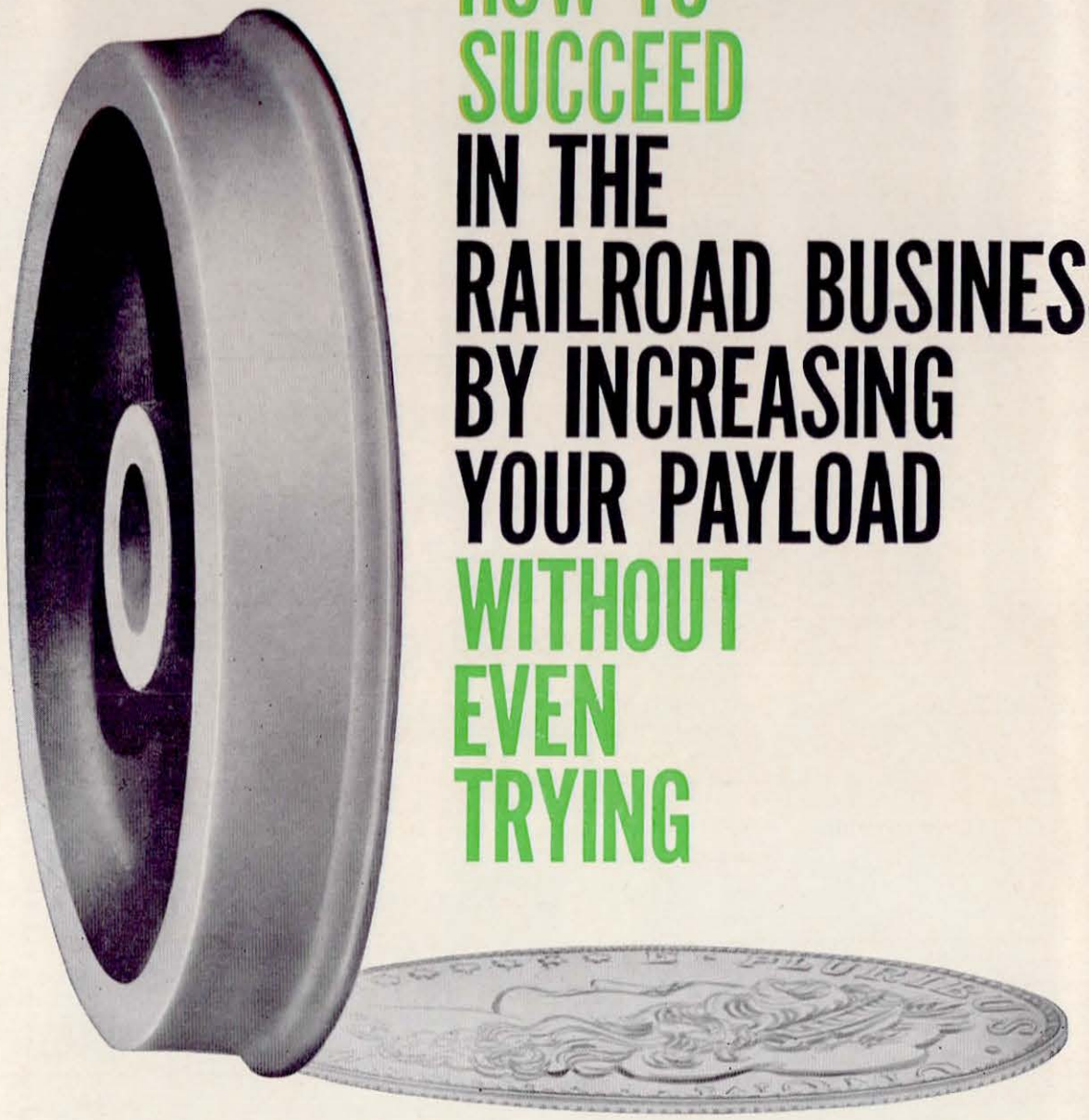
TIMKEN®

TAPERED ROLLER BEARINGS

HOW TO SUCCEED IN THE RAILROAD BUSINESS BY INCREASING YOUR PAYLOAD WITHOUT EVEN TRYING



Succeed without trying? As easy as this . . .

A carset of Edgewater *wrought* steel wheels for a 50-ton freight car weighs 560 pounds *less* than wheels manufactured by a different method.

When you use Edgewater wrought steel wheels, you can put this 560-pound saving per car into payload or useful special equipment—where it pays!

WHY CUT YOUR CAPACITY TO HAUL?

Take this easy step along the road to success! Buy denser Edgewater wrought steel wheels. They do a better job, and weigh less.

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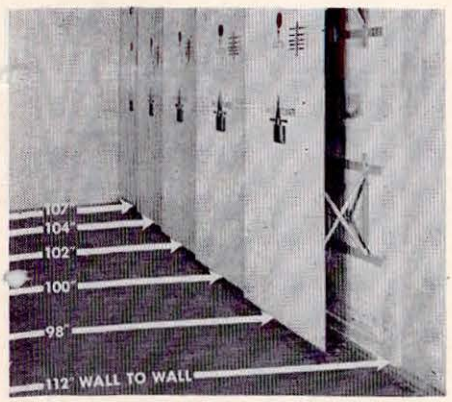
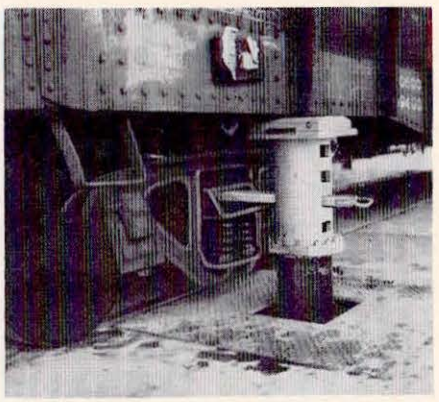
NEW PRODUCTS REPORT



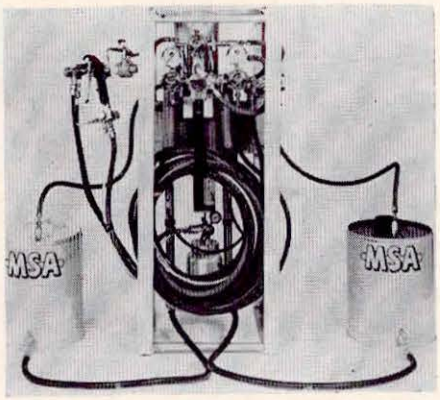
Side Fillers (RA-1)

New Evans freight-car side fillers extend to six positions, fitting any size box car. They do not rest on floor, so there is no obstruction at floor level when handling palletized loads. Being a permanent part of car, no panels can be removed or lost. Fillers move outward from wall and lock automatically in various positions. When not needed, they collapse against the wall. Each filler can be unlocked and pulled out by a lever without lifting. *Evans Products Co.*



Car Jack (RA-2)

A side-frame lifting bar on new 40-ton jack in RMC spot car repair system is said to do more work at about 30% less cost. A mechanical safety device and hydraulic controls simultaneously operate all jacks from a remotely positioned control panel. Boxes can be repacked, center plate greased, and, because bolster is lifted, truck spring and accessories replaced —work not possible with jacks lifting under the side frame. *Railway Maintenance Corp.*



Foaming Unit (RA-3)

The gun of the M-S-A Rigiseal urethane foam system sprays foam at 3 lb per min. Foam expands to thirty times its volume and "sets up" in 30 sec. It can be applied at a rate of 24 sq ft per min to a thickness of 1 in. It is compounded with a "K" factor of .14, which is said to be twice the factor of other insulations. It will adhere to concrete, steel, and wood, and may be sprayed on water or air lines to prevent freezing. *Mine Safety Appliances Co.*

Neoprene Adhesive (RA-4)

A sprayable, fast-drying adhesive, Bondmaster G442, is said to provide high-strength bonds immediately on contact when either room temperature or hot-contact bonding techniques are used. Its "hot holding ability" reaches a higher level than previous one-part formulations without sacrificing bonding range. Aluminum specimens subjected to a 25 psi load at 180 deg F have withstood the load for over 2 hr without failing. *Pittsburgh Plate Glass Co.*

'One-Coat' Epoxy (RA-5)

Epoloid K, a catalyzed epoxy which combines a primer and finish coat in one product, is used to protect the glass-reinforced plastic shell of the new XP-1 plastic tank car built for the North American Car Corp. The coating on the car is yellow, with red markings. It is said to be nonstaining and to have good gloss retention and high corrosion and impact resistance. It can be one-coated to 3-6 mils dried-film thickness. *Rowe Products, Inc.*

Protective Coating (RA-6)

Super Dampcoat, a non-yellowing enamel coating, is said to resist fungus attack and to be chemical resistant. It can be applied by brush, roller, or spray to walls and ceilings, wood, metal, or masonry, wherever high humidity is a maintenance problem. It leaves no residual odor to affect persons or perishable commodities. It is available in Super White and pastel colors, in gloss, semi-gloss, or flat finish. *Wilbur & Williams Co.*

RAILWAY AGE WEEKLY

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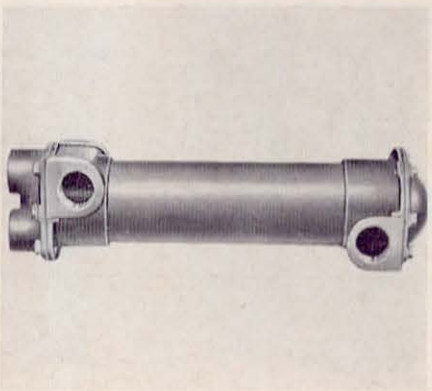
NEW PRODUCTS REPORT

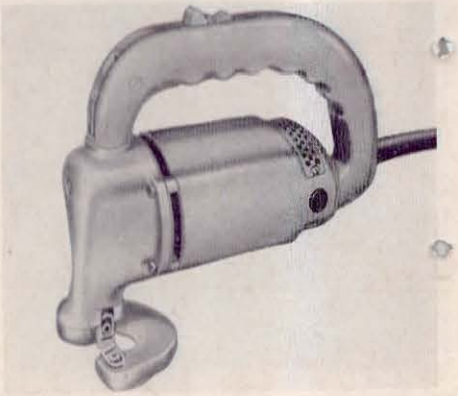


Fuel Oil Heater (RA-7)

The Vapor diesel engine fuel oil heater uses waste heat from the engine cooling system to improve fuel viscosity in sub-freezing weather. It is said to eliminate paraffin accumulation in pumps, filters and injectors, preventing engine power loss or failure. No insulation of fuel tanks is required. Copper tubes rolled into headers on the drawn seamless brass body are silver soldered to guarantee no water leakage. *Vapor Corp.*

Steam Cleaner (RA-8)

Electric ignition, interlocked water and fuel pumps which cut off burner in case of water failure, and a soap control with adjustable strength selector feature the oil-fired 100-gpm steam unit designed for medium and heavy duty cleaning. Its anti-siphon float tank complies with sanitary codes, and its helical coil spring assembly is said to guarantee 75% thermal efficiency. An automatic soap-dissolving control eliminates hand stirring. *Clayton Mfg. Co.*



Electric Shear (RA-9)

A high-speed electric shear, capable of cutting 16-gauge steel and galvanized sheet, is said to have a 50% greater capacity in aluminum, copper, and other nonferrous sheets. It operates at 3,750 strokes per minute on a universal ac-dc, 25/60 cycle motor, and is available either as a 115- or 230-volt tool, rated at 5 amp for 115 volts. A six-leaf thickness gauge is supplied for setting clearances. *Ingersoll-Rand Co.*

Mobile Light (RA-10)

A 14-in.-diameter floodlight is mounted on a swivel base on a two-wheel light and electric power cart designed for use where there is no electric power. The light, equipped with a 500-watt bulb, can be turned from side to side, or tilted up or down. The 1,200-watt, 115-volt a-c alternator which supplies the electric power for the light, may also be used to power electric tools. It is driven by a 3-hp, 4-cycle gasoline engine. *Snap-On Tools Corp.*

Self-Tapping Screw (RA-11)

The Parker-Kalon Kaptiv screw forms its own threads in steel, plastic, alloys of copper, aluminum and other metals. It is made of casehardened low-carbon steel in a two-thread design, coarse for the end with fine threads following up to the screw head. By forming or extruding finer threads in the screw hole, the coarser threads are prevented from re-engaging as the Kaptiv is unscrewed. *Parker-Kalon Div., General American Transportation Corp.*

Pocket Burnisher (RA-12)

A new pocket pen-type burnisher-cleaner can be used on any type of relay contact—silver, platinum, gold, palladium, tungsten, molybdenum—all precious metal contacts. The tool has a chromium-plated barrel and aluminum chuck. Adjustment of the flexible blade—length and rigidity—is possible by varying its depth in the chuck. The insulated cap permits working on "live" contacts. Replaceable blades are available. *Jonard Int'l. Corp.*

Microbicide (RA-13)

Extensive field studies by the Standard Oil Co. of Ohio are said to have shown Biobor to be effective in overcoming corrosion, filter plugging and water emulsification which are caused by fungi and bacteria in the storage and distribution systems for diesel fuels. Small quantities of the boron compound can be blended directly into the fuels to protect both wayside and locomotive fuel systems. *U.S. Borax & Chemical Corp.*

New Literature

OPEN ARC WELDING. This 4-page bulletin from the McKay Co. details the historical development of open arc welding and shows how McKay Tube-Alloy Wires have contributed to the success of that welding method. (NL-1)

TRUCK LEASING. A new brochure from National Truck Leasing System tells how a full-service truck-leasing arrangement can be applied to specific trucking needs. (NL-2)

LADING PROTECTION. The American Car and Foundry division of ACF Industries has published an illustrated 40-page brochure describing the company's new cushioning unit for freight-car-lading protection. Operation of the ACF Freight-Saver unit is described schematically, and a table of specifications is provided. (NL-3)

STAINLESS STEEL FILLER METALS. The American Welding Society has published two revised specifications covering stainless steel filler metals. Both were prepared by the Joint AWS-ASTM Committee on Filler Metal. (NL-4)

CAR CLEANING. "Systems Offered by Pak-Mor That Can Be Modified or Adapted to Suit Your Operation and a Pictorial Presentation of the Operation on the Soo Line" are the subjects of the Refuse Collection Packer Bodies, Trailers and Systems catalog issued by the Pak-Mor Manufacturing Co. (NL-5)

Market Outlook

Carloadings Up 1.7% Above Previous Week's

Loadings of revenue freight in the week ended June 15 totaled 616,261 cars, the Association of American Railroads announced on June 20. This was an increase of 10,177 cars, or 1.7%, compared with the previous week; an increase of 25,960 cars, or 4.4%, compared with the corresponding week last year; and an increase of 14,086 cars, or 2.3%, compared with the equivalent 1961 week. Ton-miles generated by carloadings in the week ended June 15 are estimated at approximately 13.1 billion, an increase of 9.6% over the corresponding week of 1962, and 11.8% over 1961.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, June 15

District	1963	1962	1961
Eastern	87,711	85,939	86,485
Allegheny	107,909	98,634	97,539
Pocahontas ...	58,364	52,971	56,078
Southern	113,051	108,040	107,897
Northwestern .	85,266	86,542	88,319
Central Western	120,044	116,534	125,099
Southwestern .	43,916	41,641	40,758
Total Western Districts	249,226	244,717	254,176
Total All Roads	616,261	590,301	602,175
Commodities:			
Grain and grain products ...	55,824	48,209	58,835
Livestock	1,990	2,432	3,039
Coal	119,141	110,923	115,052
Coke	8,839	6,155	6,758
Forest Products	37,304	38,114	38,312
Ore	54 816	56,301	49,904
Merchandise l.c.l.	17,050	23,718	28,516
Miscellaneous .	321,297	304,449	301,859
June 15	616,261	590,301	602,175
June 8	606,084	582,760	593,316
June 1	548,021	529,285	531,705
May 25	598,419	580,383	578,767
May 18	601,062	586,946	568,467
Cumulative total, 24 weeks ..	13,000,375	13,192,995	12,459,355
Estimated Revenue Ton-Miles (Millions) 24 weeks ..	281,100	271,700	247,199

PIGGYBACK CARLOADINGS—U. S. piggyback loadings for the week ended June 8 totaled 15,986 cars, compared with 14,402 for the corresponding 1962 week. Loadings for 1963 up to June 8 totaled 341,914 cars, compared with 300,559 for the corresponding period of 1962.

IN CANADA—Carloadings for the ten-day period ended May 31 totaled 120,595 cars, compared with 63,484 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
May 31, 1963	120,595	32,437
May 31, 1962	120,900	35,589
Cumulative Totals		
May 31, 1963	1,381,917	489,210
May 31, 1962	1,368,938	505,964

New Equipment

FREIGHT-TRAIN CARS

► *Atlantic Coast Line.*—Ordered 200 giant-sized woodchip hopper cars from Bethlehem Steel at a cost of more than $2.75 million. Scheduled for November delivery, the order will bring Coast Line's ownership of woodchip cars to 600. ACL has also ordered four 89-ft, 70-ton, Hydroframe-40 flat cars from Pullman-Standard. The cars, which will be equipped with Whitehead & Kales bi-level auto racks, will cost approximately $100,000. Delivery is scheduled for August.

► *Canadian National.*—Ordered 55 tri-level automobile rack cars from National Steel Car for delivery later this summer.

► *Canadian Pacific.*—Ordered 75 89-ft, 70-ton tri-level flat cars from National Steel Car for automobile service. Delivery will begin later this summer. CP also ordered from National Steel Car 75 70-ton drop-bottom gondola cars at a cost of more than $1 million. The cars will be assigned to the railroad's subsidiary, the Dominion Atlantic Railway in Nova Scotia, for gypsum traffic. Deliveries will begin this month.

► *Chesapeake & Ohio.*—Ordered 325 50-ft, 70-ton cushion underframe box cars from Pullman-Standard at a cost of $6.6 million. The C&O is also spending $1.1 million for 75 Airslide covered hopper cars.

► *Clinchfield.*—Ordered from Magor 75 70-ton cushion underframe, 50½-ft box cars, equipped with 9-ft doors, roller bearings and lading protection devices. Delivery of the $1,190,000 order will be made in September and October.

► *Detroit, Toledo & Ironton.*—Ordered 50 60-ft, 70-ton box cars from Greenville Steel Car. Delivery is scheduled for August.

► *Milwaukee.*—Ordered 25 100-ton box cars from Pullman-Standard at a cost of approximately $557,000 for delivery in late August.

► *New York Central.*—Ordered 85 100-ton box cars with specially designed interior racks and bulkheads for the handling of automobile axles, from Greenville Steel Car. Delivery of the $2.1-million order will begin in the fall. The cars will have cushion underframes.

► *North American Car.*—Ordered 323 70-ton center-flow covered hopper cars from ACF for its leasing service pool. The cars (unit price: $12,000) will be equipped with solid-bearing trucks. ACF will deliver 120 in July and the balance in the fourth quarter.

► *Wabash.*—Ordered 25 60¾-ft, 100-ton box cars for high-density auto parts service from Greenville Steel Car at a cost of approximately $500,000 for Sept. 1 delivery.

PASSENGER-TRAIN CARS

► *Chicago Transit Authority.*—Awarded Pullman-Standard an $18,990,000 contract for construction of 180 air-conditioned rapid transit cars. Deliveries will begin in April.

NH Changes Freight Sales Organization

The railroad has formed a team of 'industry sales managers' to serve as basic commodity specialists. Their assignment is to develop new business and re-capture revenue lost to competition.

In a determined move to add some larger profit figures to its freight revenue accounts, the New Haven has undertaken a major reshuffling of its freight sales department, including the formation of a top-level team of commodity specialists.

Under the plan, six of the road's prime salesmen—formerly in charge of the railroad's regional offices—have been freed of all other duties and have been given the job of directly selling the New Haven's services on an industry or commodity basis.

● **New piggyback department.** The reorganization also sets up a new and distinct TOFC department to put new emphasis on servicing a growingly important source of revenue for the bankrupt line. Last year piggyback traffic increased 13% and brought in 18% more revenue than the previous year.

The new executive specialists—who will be called industry sales managers—will be concerned with the basic group of 20-odd commodities that earns the New Haven about 60% of its income.

As an example, one executive will have the responsibility for marketing the road's services to the iron and steel industry; another will concentrate on all phases of cement transportation. Assignments have been made on the basis of previous experience, and most members of the team will be working in fields already familiar to them.

● **Commodity experts.** "These men will become experts in their respective commodity areas," Charles E. Ragland, vice president of freight traffic, explained. "They'll make extensive analyses of industry problems and developments on a national, rather than local basis. And they won't be bound by territorial limits."

While providing more marketing assistance and service to existing customers, the team will also be out to drum up new business and to recapture traffic lost to competition.

Executives in the team will report to Mr. Ragland through F. Russell Briggs, formerly freight traffic manager-sales at New Haven, who has been appointed assistant vice president-marketing, and charged with the over-all direction of the new program.

"These men," Mr. Ragland said, "will be 'decision men' with the authority to cut across the company board to get things done. They're men who have proved their ability to sell. And all have come up through the rate department."

In marketing the road's services on an industry-commodity basis, rather than through the previous regional sales setup, Mr. Ragland believes the railroad-customer relationship can be improved.

"This concept, properly applied, can be of tremendous benefit to shippers," he said. "The key to the whole problem is knowing all about the industry we are serving . . . its needs, the materials it uses. And the way to do it is to live with the industry itself."

An important part of the new New Haven sales concept will be increased emphasis on freight rates specially tailored to attract additional business. This will be supervised by George N. Sabin, former general manager-freight rates, who has been appointed assistant vice president-freight rates. He will closely coordinate his departmental activities with the new executive team.

● **New traffic men.** The new industrial sales managers are: John J. Murphy, who has been freight traffic manager at Hartford, Conn.; Kenneth M. Fraser, former general freight agent at New York City; Winthrop E. Pierce, regional freight traffic manager at Boston; Joseph F. Carroll, fuel and foreign freight traffic manager at Boston; Harry K. Thomas, who has been freight traffic manager at Pittsburgh, Pa., and Ralph W. Nicholas, former freight traffic manager at Chicago.

The New Haven's 23 freight sales agencies on the line and across the country from Portland, Maine, to San Francisco, California, will continue under the supervision of Arthur J. Miller, former general manager of freight sales, who has been appointed assistant vice president-freight sales and service.

William C. Gardner has been appointed manager of the New Haven's new piggyback department. He has been general freight agent in the rates and divisions section of the line.

THREE PRINCIPALS in the New Haven's reorganization of its freight traffic sales department confer with Charles E. Ragland, vice president-freight traffic, (seated). Left to right, F. Russell Briggs, new assistant vice president, marketing; Arthur J. Miller, named assistant vice president of sales and service; and George N. Sabin, assistant vice president-freight rates.

JFK Sets Work-Rules Deadline

"One last major effort" to settle the work-rules dispute is under way, at the request—almost the demand—of President Kennedy.

The new deadline for agreement is July 10. If no accord is reached by that time, the President warned carrier and union negotiators, "I shall ask for an immediate report from the Secretary of Labor and from you on the circumstances of this failure. I shall then make such recommendations to the Congress as these circumstances appear to dictate."

The President gave no indication as to which way the government might move if a request for legislation is made. Congress could be asked to permit seizure of the railroads; or it could be asked to approve a bill requiring arbitration of the issues.

● **Three deadlines.** The July 10 date is the third deadline to be set in recent weeks, as the four-year-old dispute has built closer to a climax. The first date was June 12, the end of the 30-day cooling-off period following Emergency Board 154's report. Secretary of Labor Wirtz asked for and got a postponement to 12:01 a.m., June 18. And that second deadline faded out when the President took direct action June 15.

President Kennedy took a grim line in a statement to the negotiators. Reports from Secretary Wirtz, he indicated, show no agreement has been reached—and, "beyond this, that there has actually been no real bargaining, in any effective sense, in this case." This means, he added, that in the rules dispute "collective bargaining has failed—so far. It means that in its most vital testing, the procedures established in the Railway Labor Act have failed—so far."

The case, he declared, "has already dragged on much too long," through one showdown - postponement after another. "Only the critical, crucial nature of the basic issues involved—especially the replacement of men by technology—justifies this at all."

● **Two recommendations.** But, the President noted, "there have been two Presidential board recommendations concerning these issues. It should be possible to find a solution which permits the termination of jobs which are not justified and protects the equities of the men involved."

"We didn't go looking for trouble —they brought it to us..."

"The life span of lube oil strainers used in many locomotives was much too short. No matter how carefully the copper screens were handled when removed from their cases for cleaning and servicing, they had a tendency to puncture and pull apart.

"When this problem was brought to us, we redesigned the cartridge — toughened it up, crimped the screen, doubled the filter area, reinforced it with a metal shield and designed it to fit existing housings. It solved the problem and resulted in considerable annual savings to the railroads.

"That's how most of the products in our line were developed. People in our engineering department found an answer to other people's problems. That's why over 85% of diesel locomotives in America today are equipped with one or more Farr products."

R. S. Farr

PRESIDENT, FARR COMPANY, LOS ANGELES
MANUFACTURERS OF FILTRATION EQUIPMENT FOR THE RAILROAD INDUSTRY

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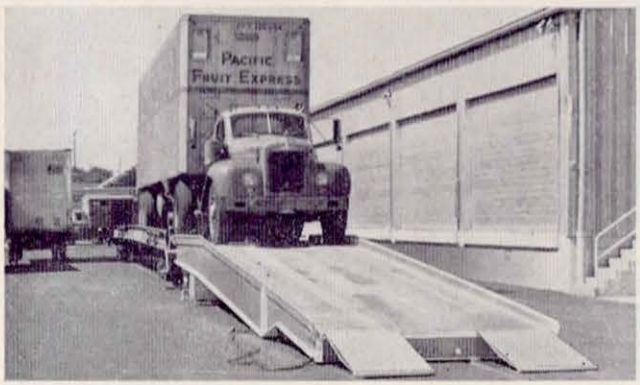
Portable & Adjustable Ramps
LOAD-UNLOAD *Faster, Safer, Easier*

Page Ramps are engineered to set up, adjust, take down, and move in minimum time and with minimum effort. They have big load capacities without excessive weight. Hoisting, moving, coupling, and safety devices are simple but dependable . . . made as foolproof and maintenance-free as possible. Page Ramps use standard components and controls. They'll stand up to the toughest day-in-day-out service—deliver more versatility and utility for the dollar, over a long service life.



MODEL ST37 TOFC RAMP

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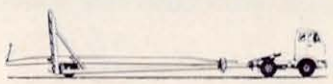

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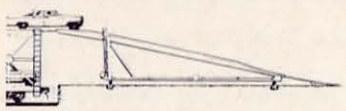

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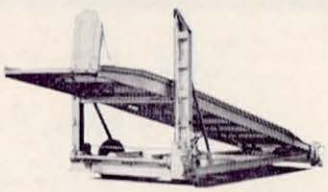

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MANUFACTURERS OF MODERN TRANSPORTATION EQUIPMENT FOR INDUSTRY

Per Diem Law Called 'Essential'

Legislation is needed to supplement the proposed car-rental system, says ICC's Walrath.

Enactment of so-called penalty or incentive per diem legislation is "essential" to supplement the multi-level per diem rental system which the railroads propose to to establish next January 1, Chairman Laurence K. Walrath of the ICC said last week. The proposed legislation would give the Commission power to prescribe penalty or incentive per diem charges to promote more buying and efficient utilization of freight cars.

Chairman Walrath's statement was made at hearings held by the Freight Car Shortage Subcommittee of the Senate's Commerce Committee. The subcommittee has before it the Senate's incentive per diem bill, S.1063.

Other presentations supporting the bill came from Eldon Martin, vice president and general counsel of the Burlington, and the two senators from Nebraska—R. L. Hruska and C. T. Curtis both Republicans. Mr. Martin spoke for a group of about 20 railroads, which, he said, own about one-third of all railroad freight cars. The railroad industry is divided on the proposed legislation, and the subcommittee was scheduled to hear opposition presentations this week.

The multi-level plan. ICC Chairman Walrath told the story of the railroad industry's multi-level proposal by references to articles which have appeared in Railway Age during the past few months. He put three such articles into the record. The multi-level plan will supplant the uniform-charge plan which has been in effect continuously for more than 60 years. The uniform charge is now $2.88 per car per day. The new system will embody a scale ranging from $2.16 per car per day for cars worth $1,000 or less to $7.74 for cars worth more than $20,000. "Worth" means original cost less depreciation (RA, May 13, p. 38).

Mr. Walrath noted that the plan was approved by a two-thirds vote of the

cars eligible to be voted, and that 30% of the cars carried negative votes. The remainder were not voted. The commissioner recalled how dissenting railroads have refused to pay per diem rate increases in the past, and that such refusals have resulted in legal actions to collect.

Sees more lawsuits. If like resistance is encountered by the multi-level plan, Mr. Walrath continued, "we are faced with another plethora of law suits . . . unless we have some binding authority such as is provided in S.1063, which will enable the Commission to promulgate and prescribe these [multi-level rentals] as being reasonable."

Meanwhile, Chairman Walrath called the multi-level plan a "fine step," but he went on to say the railroads "certainly would not contend that it would bind those roads which do not agree with it." Even assuming it is a "perfect" rental scale, "there is no way it can be enforced in the absence of unanimous agreement, which, of course, would not be binding if anyone chose to withdraw from it," he added.

The commissioner found shipper support for the legislation in returns to a poll conducted by Railway Age. Results of the poll were published in the issue of April 29, page 36. Mr. Walrath noted that 31 of 53 respondents had given a "Yes" answer to this question: Do you see need for enactment of incentive per-diem legislation? "That comports with our views," the commissioner added.

Guesses on rates. Responding to questions from Senator Winston L. Prouty (R. Vt.), who presided at the hearing, Chairman Walrath came up with a reluctant guess that the per diem rate ought to average "somewhat above $2.88, assuming that was reasonable" when it was established. With like reluctance, Vice President Martin of the Burlington guessed that a fair scale of multi-level rates might add "40-to-50-to-60 cents" to the rates scheduled to become effective January 1.

Mr. Martin hastened to add, however, that "this is a very rash statement, and I would prefer not be held to it." He went on to explain that he used these figures to emphasize that railroads he represents have no idea that there should be anything like a doubling of present per diem rates.

In his prepared statement, Mr. Martin said the reason for recent shortages of freight cars is that car construction and ownership "has been deliberately discouraged by too-low daily rental charges." The Burlington vice president also said:

"Just so long as it is cheaper to rent a car than it is to buy or build one—and that is the situation today—underbuilding will be the policy of strategically situated railroads, and construction will be held to minimum needs."

What ICC would do. ICC Chairman Walrath said the Commission's first move, if the legislation were enacted, would be "to determine the extent to which the railroads are deficient in car ownership." He explained that this would involve "a comprehensive study of traffic requirements, including peak loadings." It would also involve separate studies for various types of cars, and "consideration would also be given to the type and flow of traffic and whether the carrier is predominantly an originating, terminating, or bridge line."

In the latter connection, Chairman Walrath had said previously, in response to questions, that per diem problems of terminating railroads and short lines "certainly can be met other than by defeat of constructive legislation." Reference was made to the New Haven's $15 million per diem liability, and Mr. Walrath said New Haven operations are not normal under present conditions.

The ICC chairman was also asked if the Commission did not now have power to make a car-ownership study. Mr. Walrath conceded that it does have such power, but he added that such a study without power to act on the findings would be "an academic exercise."

In closing his prepared statement, Chairman Walrath emphasized that "no sudden or overnight increase in per diem charges is contemplated" if the bill is enacted. He pointed out that the bill provides for hearing either upon complaint or upon the Commission's own initiative.

Wider Support Urged For Transport Reform

Ben W. Heineman, chairman of the Chicago & North Western, last week challenged the American business community to back up its professed belief in free competition by actively supporting President Kennedy's transportation-reform proposals.

Mr. Heineman said "a larger gap exists between our verbal standards and actual practice than at any time in recent years. We are paying lip service to competition but all that is actually desired is a fair advantage over the competitor."

He said he was "very much disappointed, that for many reasons, the public profession and devotion of the American business community far exceeds their actual performance."

Speaking at Pittsburgh June 18 before a meeting of Pennsylvania, Ohio and West Virginia businessmen and civic leaders, Mr. Heineman charged that the nation is suffering under a "profit system where everybody is kept alive" as opposed to a system where "competition is supposed to weed out the marginal competitor."

"You either believe in competition for all," he said, "or you don't believe in competition at all."

Mr. Heineman called for immediate enactment of President Kennedy's minimum-rate deregulation proposals so that the "market place can really work and obtain a true market price and enhance the efficient allocation of our natural resources."

He said the railroad industry "is very much alive and is not a dying patient asking for plasma. All we are asking for is equality of competitive opportunity with the removal of minimum rate authority from the Interstate Commerce Commission," he said.

Enactment of the recommended legislation would have "the immediate effect of reducing the cost of doing business at a time when the profit squeeze is a national concern," he said.

He charged that the status quo government regulatory situation has not only denied the public technological progress and improvements in the railroad industry, but also has possibly retarded development in the water carrier industry as well as the trucking industry.

Mr. Heineman said that the ICC, through its power to set minimum rates, has held up transport costs to non-competitive levels under which private and exempt carriage have flourished.

Present legislation and regulation was described as preventing railroads from "instantaneous bargaining" with its competitors and customers. "Railroads are helplessly and hopelessly prevented from meeting the competition or even 'making' competition," he said.

He urged the American business community to help "secure passage of this history-making legislation and free railroads of 'dead-hand' regulation."

Mr. Heineman compared regulation of minimum railroad rates to a hypothetical situation regulating minimum rates in the steel industry, while aluminum and other metal competitors were not so controlled or regulated.

YOU OUGHT TO KNOW

ACF Industries net earnings for the fiscal year ended April 30 were $7,846,000, equivalent to $5.40 per share, on sales, rentals and services of $228,555,000. Chairman William T. Taylor said earnings from car leasing operations accounted for the bulk of the company's net income. In the previous fiscal year, ACF had earnings of $6,010,000, equal to $4.21 per share.

An air filter suit, brought by American Air Filter against the Farr Company for patent infringement by the latter's Roll-Kleen filter, has been decided in favor of the Farr Company. On May 17, 1963 the United States Court of Appeals reversed a 1950 Federal District Court ruling and held the American Air Filter patent invalid.

The first tariff for transportation of freight in rail cars from Seattle to points in Alaska has been filed with the ICC. The tariff was filed by the Alaska Railroad in conjunction with Puget Sound-Alaska Van Lines as the "Seattle-Alaska Hydro-train Tariff." To become effective July 12, it will mark inauguration of service by Puget Sound-Alaska Van Lines' new 30-car-capacity hydro-train barge. A bi-weekly schedule has been set for this first barge.

Shippers can aid common carriers in the fight against illegal trucking by checking on transport service offered to them. Such action is recommended by George A. Meyer, assistant director, ICC Bureau of Motor Carriers, who listed some indications of possible illegal operations as: (1) the vehicle arriving to pick up the load has no permanent marking nor the name of the buyer on it; (2) the vehicle is registered in a name other than that of the customer; and (3) the driver cannot definitely identify himself as a regular employee of the customer.

Ways to improve the teaching of transportation management will be the subject of a study which the Harvard Business School will conduct under a three-year grant from the 1907 Foundation, which is supported by United Parcel Service. The study will be directed by Paul W. Cherington, newly appointed James J. Hill Professor of Transportation at the Harvard Business School, succeeding Professor George P. Baker, now dean of the School. He will be assisted by Lewis M. Schneider, recently named assistant professor of business administration.

Four-year scholarships worth a total of $57,000 have been awarded to 13 sons and six daughters of Pennsylvania employees for college and technical school study beginning this September. Fourteen of the scholarships are awarded by the Women's Aid of the Pennsylvania Railroad System, and five are Frank Thomson Scholarships, endowed in 1907 by the children of the sixth president of the railroad. In the next school year a total of 82 children of Pennsylvania employees will be benefiting under student-aid plans.

Unitized trains will enable the Chicago & North Western to reduce rates on coal moving from southern Illinois mines to a Waukegan, Ill., generating plant, it was announced June 14 by E. A. Olson, C&NW traffic vice president. The reductions, filed with the Illinois Commerce Commission, are scheduled to go into effect July 15. The 100-car trains will carry minimum loads of 9,000 tons from mines and connections in the Springfield and Fulton County areas to a Commonwealth Edison Company generating plant in Waukegan. A round trip will be completed in 48 hours and switching en route will be eliminated. Rates will drop from $3.09 to $1.60 a ton from the Springfield area, and from $2.96 to $1.50 a ton from Fulton County.

A comprehensive survey of transportation education in the U.S. and Canada, the first in 37 years, will be undertaken by Northwestern University's Transportation Center. Survey forms will be mailed to over 2,500 colleges and universities asking for detailed information about credit courses and programs, non-credit and extension programs, and research activities in transportation.

Railroad travel last year was 15 times safer than traveling on the highways and over twice as safe as travel by domestic airlines, according to recently released AAR statistics. U.S. railroads carried nearly 312 million passengers a total of 19.9 billion miles in 1962. On a per-100-million-passenger-mile basis, the fatality rate for railroads was .15; for auto travel, 2.3; for domestic airlines, .35 (excluding bomb explosion fatalities); and .16 for buses.

Nationalization of European railroads did not solve the problems which led to government ownership, James N. Sites, assistant to the vice president, Association of American Railroads, told the St. Paul, Minn., Kiwanis Club in a speech June 13. "The major effect," Mr. Sites said, "was to delay solutions for 10 to 20 years while the public picked up a mounting bill for operating deficits." The deficits, he said, are caused by government-enforced obligations to provide social services at below-cost charges; bans against elimination of uneconomic lines and consolidations of unused stations and other facilities; political reluctance to reduce personnel when positions become unnecessary because of mechanization; and failure to require competing carriers to pay realistic tax charges for using public roads and air and water facilities.

No car supply shortages are expected to develop in moving the 1963 Southwestern grain crop, railroad representatives have told the Southwest Shippers Advisory Board. A survey has revealed that 1,860 box cars have been assembled for grain service, and 250 covered hoppers are currently being used. It was reported that before the harvest is completed as many as 800 hoppers may be used.

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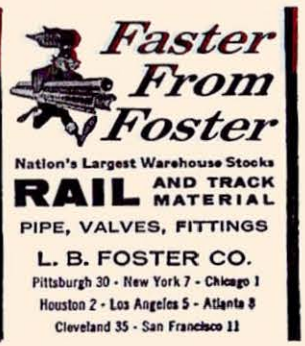

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Guides for Rate-Making

Few things railroads and shippers could do would be more to their advantage than to agree on realistic principles for pricing.

New principles of rate-making are beginning to take shape. Take this "integral train" situation, for instance. Reduced rates for traffic so handled are justifiable, not only because of large savings to the railroads in car utilization and switching, but because the traffic usually moves evenly throughout the year, and customers must schedule their shipments weeks in advance. Knowing in advance when, where and how much traffic is coming their way, railroads are able to plan their operations to secure maximum efficiency.

In the acceptance of rate concessions for integral trains at least two important principles are recognized: (1) that rates may reflect shippers' contributions to practices which lead to lower operating costs; and (2) that regularity and advance knowledge of traffic are valuable aids to efficient railroad operation, for which railroads are justified in rewarding their cooperative customers. These two principles have, potentially, a far wider application than has yet been given to them.

(The objection is sometimes raised that a lot of this bulk traffic customarily moves in multiple carloads anyhow—and the carload rates already reflect this economy. To the extent that this may be so, then it is evident that the shippers of single carloads must be getting rates lower than justifiable. Perhaps, in a situation like this, a just differentiation between single and multiple cars would have to be secured by raising the charges on single carloads.)

What about the relationship between short-haul and long-haul rates on the same commodity? Many, if not most, of those freight rates which follow traditional patterns, tend to be uncompetitively high for shorter hauls and quite low in relation to costs for longer hauls. In such cases, practically the only traffic that moves by rail is the long-haul tonnage. Yet, very often, when railroads have uneconomically high rates for short hauls and seek to correct them, the longer-haul shippers (who are already getting a bargain) will seek proportionate reductions in their rates—"so we can compete with our short-haul competitors."

The easy answer to this contention is that the short-haul producers *already* have their competitive advantage (provided by motor carriers), and railroads are not worsening the long-haul producers' competitive position by recapturing some of this short-haul tonnage from the highway. The general recognition of this principle, by both railroads and their patrons, would go a long way toward making it possible for railroads to reverse adverse traffic trends, and to start the tonnage curves upward again. In the long run, such a reversal would benefit long-haul shippers, who are more dependent upon railroad service than the short-haul shippers are.

And what about the kind of rate-making that affords shippers bargains on inbound raw material—on the assumption that high-rated finished goods will also move outbound by rail? Too often railroads have found that they retain the bargain-rated traffic and lose the movement of the finished goods on which charges are high.

This is the practice which has come to be called "cross-subsidization"—what you lose by undercharging for some hauls you try to recoup by overcharging for others. This practice won't work in a regime of competition. Both railroads and shippers would do well for themselves if they would abandon the practice as thoroughly and as rapidly as they can.

Then there is the so-called "transit" service. It is certainly sound economically to give rock-bottom prices to the customer who gets his inbound freight by rail and sends it to its final destination, also by rail. But how low is "rock bottom?" Surely it should not be below the added out-of-pocket cost—yet we have seen cost figures on a fairly large sample of transit movements where the average extra expense was at least double the added charge for the service. And there is also the large added clerical expense to be considered. Bargains for inbound-plus-outbound traffic are sound enough, but it is not to anybody's advantage, in the long run, for railroads to provide any service whatever, at less than the added cost which the service occasions. (Of course, it is actual added costs—not just those shown by Form A regional averages—which should be the gauge.)

'Loss Leaders' Won't Work

So-called "loss leaders" may fool the consuming public in its purchase of retail goods, but they certainly can do very little to attract remunerative traffic to railroads.

The foregoing instances are, of course, only a random sample of many of the important policy questions which responsible transportation people—in both shipper and carrier camps—must resolve. Answers will be developed and accepted only after widespread discussion.

These are days when getting up programs for traffic and transportation meetings should be as easy as falling off a log. What transportation needs is widespread acceptance of some new principles of transportation pricing—just as the "value of service" principle was accepted (appropriately at the time) a generation and more ago.

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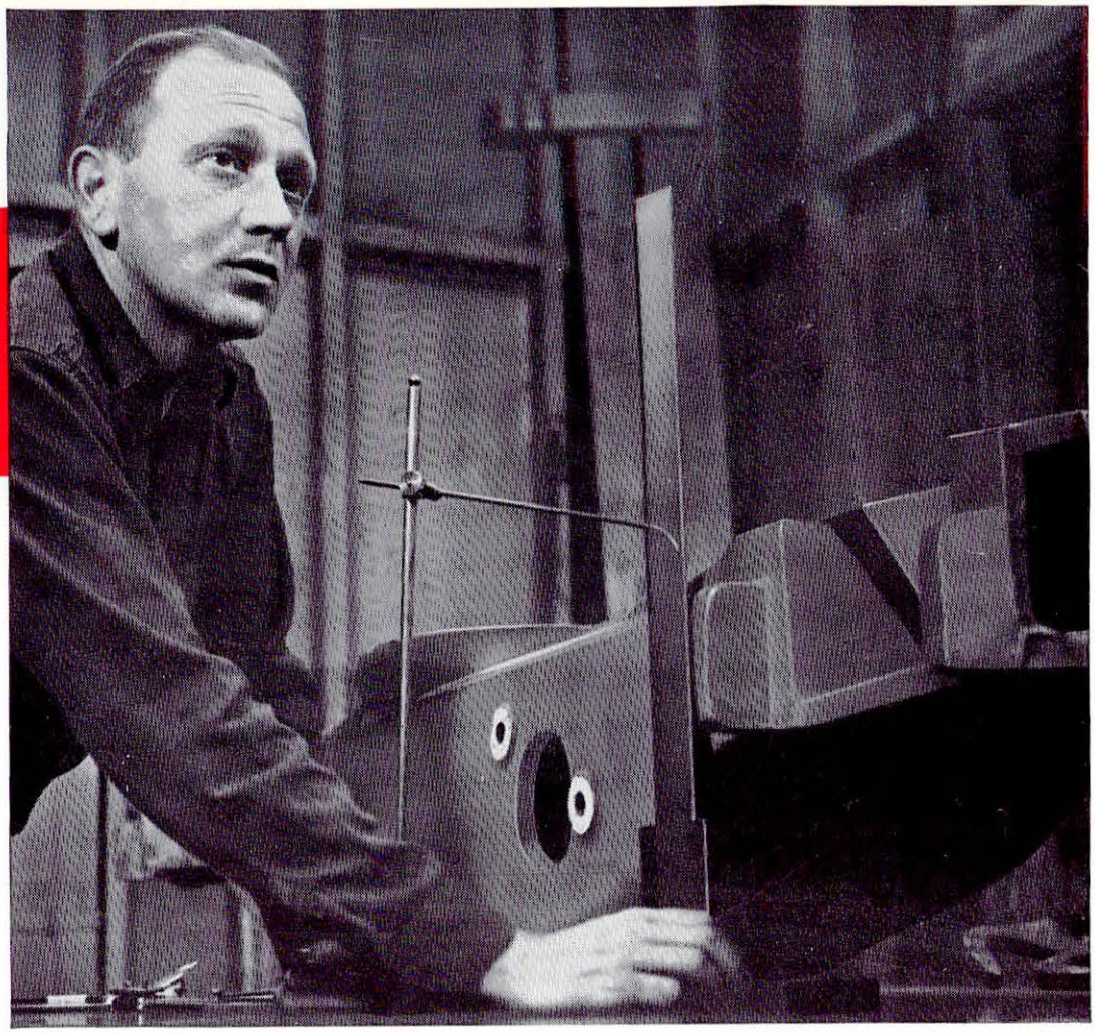

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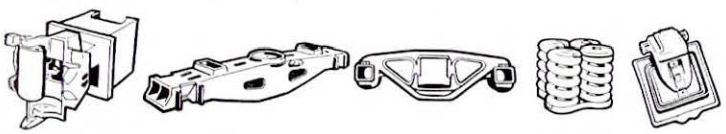

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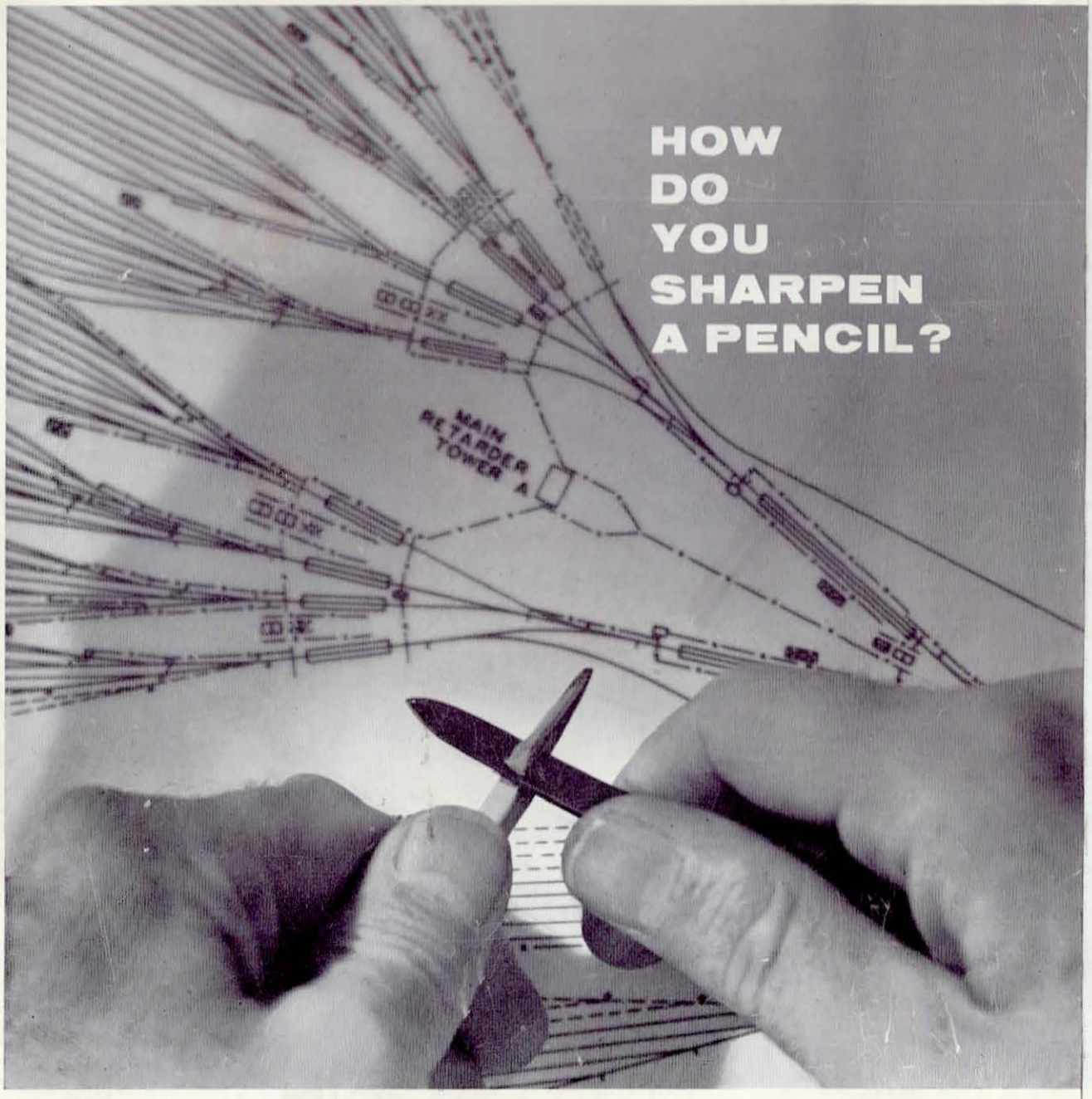

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